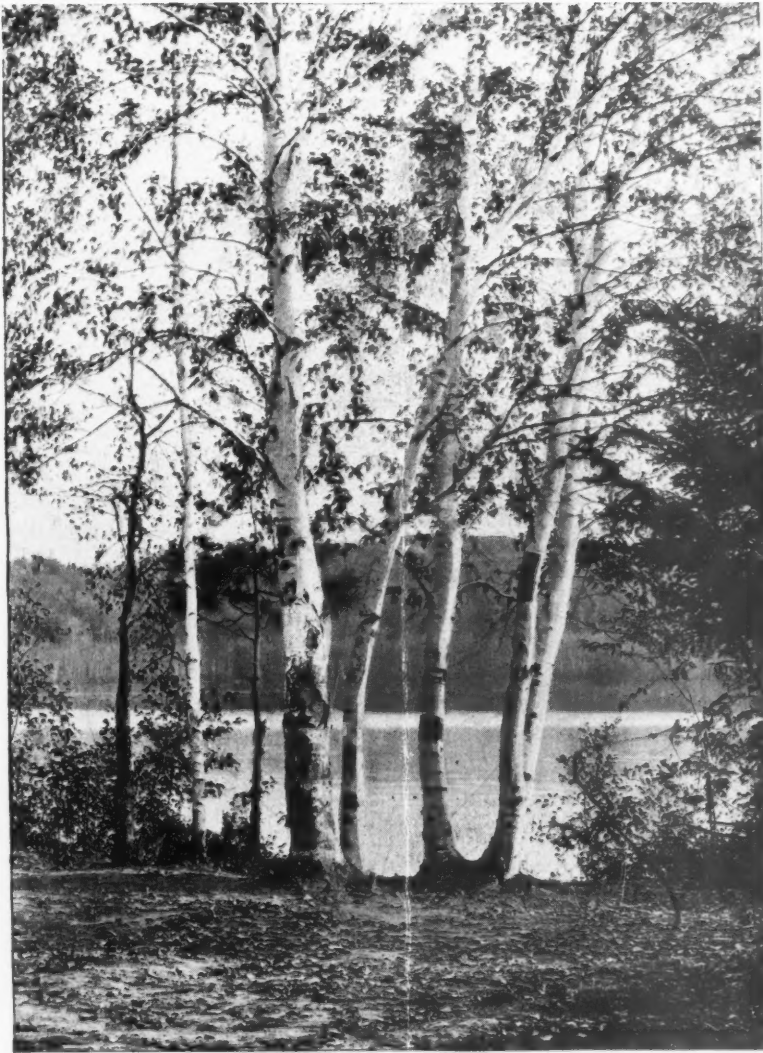


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The Cornell Countryman



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Volume XXVIII

APRIL
1931

Number 7

THE COST-CUTTING FARMALL Pleases the Modern Farmer

WHILE Agriculture as a whole has its troubles, it is a significant fact that great numbers of farmers in all sections are making money. Even at extremely low prices for their products they manage their operations so as to return a profit. They have concentrated their attention not on price but on the control of their production costs—and that is a vital matter for every individual farmer.

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rotary hoes up to 50 or 60 acres. It handles all haying jobs, cutting a 14-foot swath with a 7-foot Farmall-powered mower and 7-foot trailer mower attached, and it also pulls rakes and loaders, and operates stackers. It operates grain and corn harvesting machines.

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Mr. Elza C. Lawson, Steward, Illinois,
keeps corn production costs on his
100 acres down to 14.5 cents a bushel

Land worth about \$150 per acre Yield per acre, 50 bushels

Days	OPERATION	Tract. Cost at \$4.55 Per Day	Labor Cost at \$3.00 Per Day	Total
15	Plowing - - - - -	\$ 68.25	\$ 45.00	\$113.25
8	Disking (Twice) - - - - -	36.40	24.00	60.40
2	Harrowing (Twice) - - - - -	9.10	6.00	15.10
3	Planting (4-row) - - - - -	13.65	9.00	22.65
3	Rotary Hoe - - - - -	13.65	9.00	22.65
20	Cultivating (4 times) - - - - -	91.00	60.00	151.00
10	Harvesting (1-row) - - - - -	45.50	30.00	75.50
		\$277.55	\$183.00	\$460.55

Other Costs

Seed, 17 bushels at \$3.50 per bushel	-	-	-	-	59.50
Share of general farm overhead	-	-	-	-	4.00
Team and man, 10 days (hauling)	-	-	-	-	60.00
Machinery other than tractor	-	-	-	-	139.23
†Total Crop Cost	-	-	-	-	\$723.28

Yield 5,000 bushels—Cost per bushel, 14.5 cents
Mr. Lawson's Cost per Acre, \$7.23
Government Average Cost per Acre on Corn Belt Farms with Similar
Yields, \$16.33

†Land rental, interest on investment in land, and land taxes are not included in these costs. If Mr. Lawson had sold his corn at 62 cents a bushel (the Government's Average Illinois Farm Price on Dec. 15, 1930, which is considerably lower than prices prevailing in the early fall) and had allowed himself 3 cents a bushel to cover marketing cost and \$200.00 to cover amount paid out for taxes on land, his corn would have paid him a profit amounting to \$206.72, or a return of 13.5 per cent on his land investment. This return could be greatly increased and the 3-cents-per-bushel marketing cost saved by converting the corn into marketable livestock.

FARMALL is a Vigorous Community Builder

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15.10
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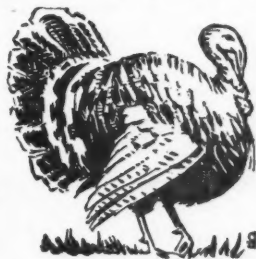
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Chickens and Fowls

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The Home.

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The Cornell Countryman

A Journal of Country Life—Plant, Animal, Human

Volume XXVIII

April, 1931

Number 7

The Real Job of the Federal Farm Board

By Whiton Powell '24

MOST of the criticism of the Federal Farm Board's actions, like most of the praise of its actions, has been strong but not well considered. It is only to be expected that those who have not benefited from its activities should be immoderate in their praise of the Board and the Agricultural Marketing Act. Likewise, it is not surprising that those who see, or think they see, a danger to their personal interests in its activities should be violently antagonistic to the Board and everything connected with it. I shall attempt in this article to evaluate, so far as possible without prejudice, some of its more important activities and policies. I shall try to bring them into focus in order to judge their relative importance and to judge also the validity of some of the more important criticisms that have been offered.

Although most of the readers of this paper are undoubtedly familiar with the main facts concerning the Agricultural Marketing Act and the Farm Board, it may perhaps be worth while to summarize the provisions of the Act. This law stated it to be the policy of Congress to bring about the equality of agriculture with other business, primarily through the improved marketing of farm products. It lists four different ways by which this is to be done. The first two of these are by minimizing speculation and by preventing inefficient distribution of agricultural commodities. No specific methods for accomplishing these objects are provided in the Act, and it seems clearly implied that the specific methods that were provided for accomplishing the third and fourth objects were expected also to accomplish the first two. The third object is the development of systems of farmer-owned and farmer-controlled cooperative marketing associations. The fourth object is the prevention and control of surpluses of agricultural commodities. Obviously, the development of cooperative associations is intended to prevent and correct inefficient methods of distribution. Equally obviously, the prevention and control of surpluses of various

commodities would tend to minimize speculation. It consequently seems safe to say that Congress had in mind to bring about effective marketing particularly by means of strong systems of farmer-owned cooperative marketing associations and by the prevention or control of surpluses of farm products.

Nearly all the specific powers given to the Federal Farm Board for the administration of the Act relate directly to one or the other of these methods. They divide themselves into two rather clear-cut groups, one group relating to the development of cooperative marketing associations, and the other group bearing on the prevention or control of agricultural surpluses.

THE BOARD has four fairly well-defined powers with regard to the development of cooperative marketing associations. First, it is instructed to promote education in the principles and practices of cooperative marketing. Second, it is instructed to promote the organization of new cooperative organizations and to assist in the improvement of the operating practices of existing organizations. Third, it is given the power to make loans to cooperative marketing associations from a fund of \$500,000,000 appropriated for that and other purposes. Fourth, it is given the power to insure cooperative associations against declines in the prices of the commodities that they handle. Thus the Board may do nearly anything to develop efficient cooperative marketing associations except to organize and manage them. The associations must exert their own initiative along those lines.

A second main group of powers given to the Board relates to the prevention and control of surplus production of agricultural crops. The Board is instructed to investigate and report the prices and the prospects for future prices of various important commodities. By so doing, it should be able to give the farmers of the country information concerning the probable future returns from various crops so that each individual farmer may be able

better to judge for himself what should be included in his crop rotations. In the second place, the Board is empowered to investigate and advise concerning conditions of overproduction of various crops with a view to preventing surplus production whenever it seems to threaten the market. Third, once surplus crops are found to be on the market, the Board may recognize and finance so-called stabilization corporations to purchase the supply of the commodity in order to avoid too great a depression of price. (Although it is commonly overlooked, this phase of surplus control involves not only the purchase of commodities with a consequent upward tendency of prices, but also their subsequent sale with a resulting downward effect on prices.) Finally, the Board is authorized to investigate a variety of subjects related to the problems of surplus control and marketing, such as studies of land utilization, market expansion, and transportation conditions.

Since the development of an effective system of farmer-owned and farmer-controlled cooperative associations is given greater emphasis, it is naturally to be expected that the Board would devote its primary attention to this problem. Its attitude on this point was well expressed in a letter addressed by Chairman Legge to Senator McNary, early in October, 1929. The following is quoted from this letter: "The process of stabilization . . . divides itself into two rather distinct classes. The first class is what might be called normal operations, involved in almost everything the Board is doing. Every measure taken to increase the effectiveness of cooperative organizations in any commodity, or improve their financial position, to centralize or correlate their activities so as to make their operations more effective, is in itself a process of stabilization. It is our hope that as time goes on this activity will in most cases prove to be all that is needed. . . .

"The second form of stabilization might be termed extraordinary or emergency operations, whereby, because of a large surplus of any commodity, the operation would consist of buying and

taking off the market some considerable part of the tonnage so as to relieve the pressure, and carrying the product until some future date in the hope that there would be a more favorable opportunity of disposing of it. . . ."

THIS states clearly and conclusively the Board's understanding of the purposes of the Agricultural Marketing Act and its policy thereunder. Accordingly, its first actions were directed toward acquainting itself with the problems of the cooperative organizations in the United States, with a view of undertaking their further development and improvement. In this connection, certain major policies were early developed and subsequently adhered to. One of the earliest policies announced was that of working with existing cooperative associations rather than undertaking to organize new ones. If the farmers of any area feel the need of a cooperative, the Board will lend its assistance, but the first steps must be taken by the individual farmers.

Coincident with the decision to build upon existing organizations, the Board determined upon a second important policy. It observed that there were thousands of farmers' cooperative associations already operating and handling various commodities, often in competition with each other. It appeared to the Board that one of the first steps in the promotion of greater efficiency on the part of these organizations must be their unification in regional and nation-wide groups, each group, of course, dealing only in a single group of closely related commodities. It was believed that three advantages would be gained.

In the first place, it was assumed that a large volume of business would give each central agency a greater voice in the determination of the prices at which the commodity would be sold. Possibly something is to be gained in this direction; nothing seems likely to be lost. A second advantage is that such central organizations could distribute the commodities to better advantage. The various references by the members of the Board to this subject suggest that they have in mind a type of operation such as has been conducted by the California Fruit Growers' Exchange. Through a wide-spread sales organization they have been able to control more carefully the destinations of their products. Hence, some markets are not over-supplied with other markets under-supplied. They deal with perishable commodities, and whether this plan can be extended to non-perishables is doubtful. In the third place, it was anticipated that a concentration of a substantial volume of a product in the hands of a single organization would permit of reduced handling costs. It has been clearly demonstrated many times that unit costs of operation tend to decrease with increases in volume of business. It is therefore possible that able management in control of such large scale marketing organizations can bring about economies

that are not open to smaller organizations. It seems, therefore, that the Board's program of unification of control among co-operatives handling the same commodity promises one or more advantages to the associations and their farmer-members in the marketing of their crops.

It has also been the policy of the Board, obviously necessary, to render its financial assistance most freely to the associations that comply with its policies and evidence a desire to work with it in its program for the development of cooperative marketing. This, indeed, is strictly in compliance with the first section of the Agricultural Marketing Act, which states that the Board's powers are to be used only in furtherance of the objects stated at the beginning of this article.

LET US now turn for a moment to the criticisms that have been directed against the Board's activities in the development of cooperative marketing. There have been only two phases which have been the subject of any very widespread attack.

First, there has been criticism of the low interest rates at which loans have been made to cooperative associations. It is claimed that this constitutes an unfair subsidy to these associations. It might be observed that this is not the first time that government money has been used to assist specific industries for what was believed to be the welfare of the whole nation. But aside from that, let us look at the question on its merits.

The rates of interest on such loans are based upon yields of government securities and are limited to a maximum of four percent. During the past year of unusually low commercial interest rates, loans have been made at rates as low as one and one half per cent per year. There are a number of circumstances that cause this to be less favorable than it appears.

In the first place, a large proportion of the loans made by the Board have been to finance payments to members of associations, while their commodities are in storage prior to sale. In order to conserve its funds, the Board has not granted loans of this type until the borrowing associations have obtained as much as they can from the usual commercial sources. In the second place, the Board, as an agency lending government funds, must take unusual precautions concerning the collateral pledged to secure the loans. This involves a large amount of red tape and the hiring of lawyers and auditors. As a result, when these costs are added to the interest payments, the real cost of the loan may be as great as those from commercial sources.

It would seem, therefore, that the much criticized advantage of low interest rates actually exists only in a few instances, and seldom in full degree. Furthermore, a badly managed association cannot long exist by virtue of obtaining a portion of its funds at relatively low interest rates. Too many other factors enter into the efficiency or lack of efficiency in manage-

ment. Leaving aside the theoretical question of the propriety of the low rates, *practically* they are of little significance.

On the other hand, the provision for loans to cooperative associations, regardless of the interest rates attached, fills an important need on the part of the associations. Those that have outgrown their local communities have found their financial problems much more difficult. Their fixed properties are often too large to be financed by a single mortgage, while at the same time they are too small to obtain economical financing through the medium of the public market for bonds. The funds available from the Federal Farm Board thus fulfill a need that has been felt by the cooperatives for some time.

THE SECOND line of criticism of the Board's policies in developing cooperative associations has referred to the supposed domination by the Board over the regional and national associations that have been formed as a result of its initiative. This criticism, coming from farmers' organizations which might be expected to take a favorable attitude toward the efforts of the Federal Farm Board, would seem to be more worthy of consideration. Many cooperatives, however, have required their members to join general farm organizations such as the state Farm Bureau Federations and the state Farmers' Unions. The Board not unnaturally has felt that it could not indirectly assist these general farm organizations by supporting cooperative associations that required payment of a fee to a general farm organization. It took the position that a cooperative association should be open to any honest farmer who has some of the commodity to be marketed through the association. In most cases, the general farm organizations considered this to be reasonable and made no objection. In one or two instances the reverse was true, and it is these organizations that have been the source of criticism of the Board on this point. The fact that no such criticism has been heard from the many associations that have cooperated in the program of the Board seems to suggest a lack of justification for this bit of criticism.

EDITOR'S NOTE: This article of Professor Powell's is the first in a series of two in which he discusses the work of the Federal Farm Board. Before coming to Cornell last fall, Professor Powell had spent much time doing special work for the Board. We believe that the press has overemphasized some of the activities of the Board, neglecting the phase which is more important. Therefore we are glad to receive these articles from a man who has had actual experience with the Board. The second, and concluding article, will appear in the May issue of the CORNELL COUNTRYMAN. In it Professor Powell will discuss the second phase of the Board's activities—the prevention and control of agricultural surpluses.

The Effect of Different Planes of Protein Intake Upon Milk Production

By E. S. Harrison

THE ESTIMATED production of high-protein feeds (nutritive ratio 1:3.0 or narrower) in 1928 in the United States was 3,626,000 tons. If this entire production were divided equally among the 22,000,000 dairy cows of this country, there would be available about 350 pounds of high protein feeds per cow. To feed a profitable dairy cow according to feeding recommendations at that time about 700 pounds of high-protein feeds would be required. Thus if all the dairy cows in the United States were fed according to these recommendations there would be an actual shortage of protein.

All the experimental work conducted between 1920 and 1928 indicated that the amount of protein prescribed by these recommendations was unnecessarily high. Notwithstanding these results dairymen throughout the New York milk shed persisted in feeding protein at much higher levels than prescribed by the feeding recommendations. Protein is the most expensive nutrient in the ration of a cow, and when supplied in excess to the demand for this nutrient, it can serve only as a source of energy. Thus, the practice of feeding more protein than is necessary to support efficient milk production represents a needless expenditure of money.

A fund established in 1928 by the Co-operative Grange League Federation Exchange and the Dairymen's League Co-operative Association made it possible for the department of animal husbandry, at Cornell University, to start an experiment to determine the relative efficiency of 16 per cent, 20 per cent, and 24 per cent total protein concentrate mixtures for milk production.

Thirty-six Holstein cows were selected for this study, because it was believed that it would be possible to get a more uniform group of Holsteins than of any other breed. Only mature cows were selected in order to eliminate the growth factor. These thirty-six cows were divided into three groups of twelve cows each, care being used to make the three groups as nearly equal in all respects as possible. One group was fed the 16 per cent, the second 20 per cent, and the third 24 per cent total protein concentrate mixture.

THREE mixtures containing the following ingredients, hominy, ground oats, wheat bran, linseed meal, cottonseed meal and corn gluten feed, were used. These ingredients were chosen because they are the ingredients most commonly used by dairy farmers in the Eastern United States.

These ingredients were mixed in such proportions as to make three mixtures containing the same percentages of fat, fiber, and total digestible nutrients per

ton, while one carried 16 per cent, the second 20 per cent, and the third 24 per cent total protein.

One per cent steam bone meal, one per cent ground lime stone, and one per cent salt were included in each mixture to insure against any possible mineral deficiency. Thus, as far as it was possible to make them, the amount of protein furnished was the only factor that varied. It is recognized, however, that there is probably some difference in the quality of the protein by reason of the different proportions of the ingredients, but there was no way to eliminate this factor.



ALL FEED IS CAREFULLY WEIGHED

All three groups were fed a No. 2 medium clover mixed hay, (that is, at least 30 per cent clover and not over 50 per cent clover), and corn silage.

One pound of concentrates was fed for each three and one-half pounds of milk produced. Daily milk records were kept on each cow. At the end of each week the milk records were totaled and the average daily production for each cow determined. By dividing the average daily production of milk by three and one-half, the amount of grain each cow should get during the following week was obtained.

One pound of hay and three pounds of silage were fed for each 100 pounds of liveweight. Practically all the cows weighed between 1250 and 1300 pounds. Therefore, most of the cows were fed 13 pounds of hay and 39 pounds of silage each day.

The cows were allowed exercise in a three-acre dry lot every day that weather conditions permitted, but they had no pasture at any time.

The average production per cow for 1928-29 for the first 40 weeks of the lactation period was as follows: the 16 per cent group produced 9,261.5 pounds of milk

and 279.81 pounds of butterfat; the 20 per cent group produced 10,055.8 pounds of milk and 329.28 pounds of butterfat; and the 24 per cent group produced 9,399.4 pounds of milk and 286.37 pounds of butterfat.

The average production per cow for 1929-30 for the first 40 weeks of the lactation period was as follows: the 16 per cent group produced 9,558.1 pounds of milk and 299.80 pounds of butterfat; the 20 per cent group, 9,690.8 pounds of milk and 318.86 pounds of butterfat; and the 24 per cent group, 9,803.7 pounds of milk and 306.75 pounds of butterfat.

DURING the first year the 20 per cent group produced a little more milk and butterfat than either of the other groups. However, this difference is not considered significant. For some reason the 20 per cent group bred back about four weeks later than either the 16 per cent or the 24 per cent group. This factor is sufficient to account for part of this difference. It is very difficult to get three groups of twelve cows each with exactly the same productive capacity, because there is no way to estimate the difference in persistency of production among cows. Two cows starting their lactations equal in production may finish with quite different productions. For this reason the author is inclined to attribute this difference to the cows making up the group rather than to the concentrate mixture used.

During the second year the differences are smaller as would be expected, since all the cows had been under uniform conditions for one year. In fact the productions are more nearly equal than could be expected from three groups of twelve cows each, all being fed the same ration.

The fact that the 24 per cent group produced a little more milk during the second year than either of the other groups while the 20 per cent group led the first year affords further support to the conclusion that the differences are not significant, but can be attributed to the expected normal variations among groups of cows.

The following gives the pounds of of grains, hay and silage required per 100 pounds of milk produced by the three groups: 16 per cent group—concentrates, 30.1; hay, 37.7; silage, 112.7. The 20 per cent group required 29.8 pounds of concentrates, 36.5 of hay, and 110.7 of silage, and the 24 per cent group required 30.3 pounds of concentrates, 37.5 of hay, and 112.9 of silage.

From the foregoing it is evident that there was no significant difference in the efficiency with which the three groups utilized their ration. [Continued on page 169]

Moving Pictures, a New Medium for Teaching Design

By Dorothy Scott

THOSE who are interested in the profession of teaching are always alert to find more effective methods of presenting subject matter material. For a long time design has been demonstrated in class teaching by means of analytical blackboard drawings and by illustrations from historical design. There have always been two difficulties, apparently unavoidable in this kind of illustration. One is the lack of ease of transition from the analysis to the design itself and the other is the time element involved in making a statement of facts. At this point the moving picture comes in to show actual growth from the analytical statement to the completed design and to do all this in an amazingly brief space of time.

The idea of using moving pictures for educational purposes is not new. History and geography have been made much more convincing through visual instruction, as this medium has come to be known. But the tremendous possibilities of such dynamic, efficient teaching are just being realized in other fields. In the art field there have been developed several splendid films on processes such as etching, bronze casting, and clay modeling. But although the idea had its inception some years ago, it was only at Farm and Home Week in February that the right opportunity presented itself for experimenting with a moving picture on design.

The problem was typical of most design teaching problems. "How could a conception of what design involves be presented in 40 minutes forcibly and entertainingly to a group of women who, for the most part, were not in the habit of thinking in design terms?" The natural answer was the moving picture.

The making of the picture was a most interesting and exciting procedure. The points to be considered were the photographing technique, the scenario, that is, the organization of the subject matter into its most brief and logical statement, and finally planning the most telling illustrations to state the subject matter.

IN ORDER that the moving picture might illustrate growth or movement from one step to the next, the picture was conceived in the animated cartoon style that necessitated setting up apparatus for photography at a close range and for controlling the number of frames that would pass the lens at a "shot". Planning the scenario was especially interesting for the time element had to be considered, as well as a logical sequence and titles that would explain the subject matter. Planning illustrations for the subject matter involved not only making drawings that would be apt but ones that could grow, the making of one experimental film of 100 feet, and studying and restudying that.

The final film as used at Farm and Home Week consisted of 325 feet. It included over 200 complete drawings. Each of these required from 5 to 10 and 12 steps in order to make it "grow" so there were over 1,000 separate "shots" or photographs. The picture takes 20 minutes to show and presents the story of various kinds of lines moving and combining to make forms, these in turn combining to make units, borders, and all-over designs in obedience to the guiding principles of orderly arrangement, balance, good proportion, unity, and interest. The picture is fascinating not only from the standpoint of its being animated and novel, but also because the subject matter, usually considered mysterious to the layman assumes such simple, dynamic and understandable form in this visual presentation.

The acclaims of those who attended the lecture where it was used, testified to its hearty reception. It has since been presented to groups of various ages and interests, with the same resulting enthusiasm. As a teaching device its merits can hardly be overestimated.

It is earnestly hoped that this particular film will be greatly amplified to cover many other phases of the design field and that its initiation will lend courage to others in allied fields in Home Economics who are as eager to combat the time element in teaching and to add the lasting qualities of force and vivid interest to instruction.

A Birthday in Agriculture

By John B. Tuthill '32

IN THE VALLEY of Virginia, one hundred years ago, a young man strode triumphant through a field of grain in the wake of an awkward contraption that was destined to liberate man from his servitude to the soil. Many thousands before him had dreamed of such a day but none of them had succeeded in combining those principles which made possible the harvesting of grain by machine. The man was Cyrus Hall McCormick, whose name is now a household word in all our farmsteads, and the story of his first reaper and its subsequent development is one of those fascinating tales of pioneering success which we like to think typically American.

Agriculture was ever under the necessity of meeting the demands of a rapidly increasing population. Though the providence of nature produced in abundance, there was still the problem of harvesting her bounty with back-breaking toil. The harvest season found the farmers hard pressed, for little advance had been made in the way of implements since Biblical

times. The sickle and the reaping hook had given way to the cradle; but this was



THE REAPER

The scythe is an instrument of great antiquity, used by the Egyptians and Romans.

little help, for the cut stalks had still to be raked, and bound, and hauled, and threshed. And so, way back in 1831, when this chap first operated successfully a harvesting machine, the world was clamoring for the beginning of a new epoch in agriculture.

It is not to be wondered at that young McCormick should have directed his energies to invention, for his father before him had tried, though unsuccessfully, to make a reaper. Several other devices of agricultural nature had also been attempted, but none were carried to the point of commercial success. But the young man's mind was early impressed by these experiments, and he became absorbed in the possibilities of producing a mechanical reaper. His own experience too, would tend in that direction, for at fifteen, finding himself unable to swing the heavy cradle in harvesting, he forthwith devised an instrument more suited to his strength. More in the nature of a contribution to mankind was the hillside plow he designed three years later. His father's mistakes

in the early reapers left the son well progressed with that all-important problem, for shortly after the last unsuccessful trial he had conceived the principles which were incorporated in his own models and in his first practicable reaper.

An old log blacksmith's shop, which had been his father's workroom, provided the tools he needed for fashioning the wood and shaping the iron parts for his machine. In addition to all of these facilities he was able to save much time by avoiding the mistakes made by his father. All of his plans were carefully worked out on paper beforehand, and models were constructed to try his ideas in actual operation. Once the correctness of his methods was so proven he set about feverishly to prepare his trial model. The harvest season rapidly drawing to a close, gave him tremendous incentive to finish his reaper in time to try it that season. And so it was that after six weeks of working day and night he tried his first reaper in the presence of the family which by then was thoroughly reaper-minded. The model was most encouraging and readily pointed the way to the completed reaper that was soon made of it. A skeptical audience it was which first saw the final product prove itself worthy.

THE implements of harvest had undergone little change in all the centuries before 1831. Efforts to improve them were made from time to time but in no instance was success great enough to merit wide adoption. Materials and methods of patterning underwent minor improvements and were subjected to all manner of variations but the basic principles remained the same. The sickle, which even in this day is a familiar tool was probably the first development of an instrument to be used exclusively in harvesting. The literature of the Egyptians and Romans and medieval peoples generally bears many references to it. Further evidence of its early use is found in paintings and sculpture which have withstood the ravages of time, and actual instruments have been unearthed in burial mounds and other excavations. The same curved blade that we know today was the sickle at its birth. A whole day's labor with this instrument could harvest about one acre.

The scythe is also an instrument of great antiquity, though it was probably suggested by the somewhat earlier sickle. The Egyptians made extensive use of it as did also the Romans and the European peoples who succeeded them. The earliest scythes were simply a long thin steel blade slightly curved and attached at right angles to a straight pole. They were poorly balanced, of course, and probably did not ease the labor of cutting very much though they must have spared the workers' backs. The cut grain fell into swaths without any other urging than the cutting stroke; so the scythe was quite an advance in efficiency. The curved handle now familiar was not introduced until the early part of the nineteenth century.



THE REAPER OF 1831

It was an awkward contraption that the first spectators saw in action, but it was the first step toward cutting the agricultural shackles.

In the eighteenth century the Flemish developed quite independently what was known as the Hainault scythe. The blade of this implement was about two feet long and rather wide and was attached to a handle which varied in length up to twenty inches according to the height of the operator. The top of the handle was bent to make it easier to hold and was fitted with a leather loop to prevent slipping. A wooden hook held in the other hand was used to draw the grain in toward the worker and hold it while it was being cut. The two implements were operated in unison.

A natural development of the scythe was the cradle scythe which remained the best grain harvesting device until the reaper was invented. It is by no means a modern development, however, although of somewhat later date than the scythe or sickle. The Romans used it, and there is evidence also of its use in Germany way back in the fifteenth century. A framework of wooden fingers attached to the handle at right angles to the blade served to deposit the grain in a way that made binding easier. During the American Revolution the cradle scythe was introduced to this country where it rapidly underwent improvement emerging as the cradle which is still a common instrument. The fingers were made longer and more numerous and were curved to correspond exactly to the curvature of the blade. Only about two acres of grain could be cut in a day with this cradle, but binding was greatly facilitated by it. Because of the changes which the cradle underwent in this country, it is commonly referred to as an American invention.

AND THEN after many years came that period of invention which was to change so completely the complexion of the whole world. Johannes Gutenberg's printing press, John Watt's steam engine, the steamboats of John Fitch and Robert Fulton, and George Stephenson's locomotive started the epoch of communication and the spread of ideas which have reduced the world to its present metaphorical small size. Transportation facilities led rapidly to the growth of manufacturing centers and the need for manufacturing

machinery. Eli Whitney's cotton gin, the spinning machine of Arkwright and Hargreave, Meikle's threshing machine and McCormick's reaper eased the way to providing the increasing needs of food and clothing. It would be an endless task to enumerate all of the inventions which followed and which are commonplace things to all of us now. But imagine life without them if you can, and you will realize the import of the changes they have brought about.

America in 1831 was incredibly primitive, sprawled over 3,000 miles of continent but settled only as far west as Missouri. "Old Hickory" Jackson was president and the entire southwest belonged to Mexico. West of the Mississippi was virgin, unpenetrated country inhabited by buffaloes and Indians and a few trappers. Transportation was supplied by canal boats, river flatboats, wagons, and saddle horses, for railroads were little more than a lively topic for conversation. Quite naturally the center of things was the eastern seaboard where Boston, New York, and Philadelphia were still in swaddling clothes. Chicago was a nebulous center of the fur trading racket, and gay New Orleans played hostess to all the waters of the Mississippi.

Great changes were brewing, however, for boundless resources yet untouched stirred the minds of men and fired their ambitions. The West was beckoning to those who sought freedom and wealth, and some of the best blood of the east was drawn into the stream of western migration. Means of transportation were sadly lacking, but great resources, increasing population, and countless unfilled needs were urging America forward. The cities' industries needed men, but the farms needed them more, for the appetite of the nation must be served first of all. With all of these forces urging a nation, that was already overzealous, to its new opportunities, it is not difficult to conceive of McCormick's invention as the taper which set off the blast of energy that went into all of the phenomenal changes which followed it. He had cut the shackles that bound America to the soil and made it possible for the country to move forward as fast as its abilities would permit.

The Biological Survey of New York State

By W. C. Muenscher

FOR A NUMBER of years the State of New York has distributed millions of fish from its several hatcheries and field stations to stock certain of its streams and lakes. The purpose of this stocking policy, to "make better fishing", in the waters of the state, was not always realized, even in some of the waters in which large numbers of fish were planted.

The State Conservation department began a biological survey of the waters of the State in 1926. One of the chief purposes of this survey was to make an examination and study of the streams and lakes and obtain a record of such information as would be of assistance in formulating a constructive stocking policy for the planting of fish.

The watershed seemed to be the most practical unit to adopt for the survey and as a basis for developing a stocking policy. Nature does not repeat herself, not even in watersheds. Consequently, one watershed has been surveyed every summer since 1926, as follows: Genesee River system, 1926; Oswego River system, including the Finger Lakes and Oneida Lake, 1927; Niagara River and the eastern end of Lake Erie, 1928; Lake Champlain watershed, 1929; St. Lawrence River system, including the Grass, Salmon, St. Regis and Chateaugay Rivers, 1930. It will take about seven or eight more years to survey the remaining watersheds of the state.

Funds for conducting the biological survey have been made available from year to year in the general conservation fund by the legislature. The survey has been made under the direction of Dr. Emmeline Moore '06, investigator in fish culture, of the Conservation department staff. The field work is conducted during the summer by a staff of scientific workers from several universities and colleges in New York and other states. In 1930 the staff consisted of over 30 workers, the largest number being Cornellians from the departments of zoology, botany, entomology, chemistry, and animal husbandry. The survey staff usually has been very fortunate in receiving the co-operation from institutions within or near the watersheds surveyed. Cornell University, the Buffalo Museum of Science, St. Lawrence University, and several of the state fish hatcheries and high schools have made available rooms and equipment for laboratory headquarters.

THE aim of the survey, from the beginning, has been a general scientific investigation of the more important factors affecting the fish populations in the various watersheds of the state. To be sure, each watershed also presents for solution certain local problems. The general plans to be followed, as well as the local problems that are to be investi-

gated in each watershed, are discussed in a conference at Albany called by the Commissioner of the Conservation Department several months before the field work begins. This conference is usually attended by biologists representing several universities and colleges within the state, the federal bureau of fisheries, the State Museum, and also representatives of sportsmen's organizations and members of the Division of Fish and Game of the Conservation Department.

THE survey staff is organized into units with one man at the head of each unit. The working plans of the units are so co-ordinated as to bear not only upon the practical problems of the fisheries of the region, but also upon the acquisition of a scientific basis for the development of a stocking policy.

In the stream survey each stream is examined with reference to natural food supply, the temperature, the flow of water and general conditions of suitability for fish life, the presence of pollution, the kind of fish and their compatibility; also the abundance of plant life and certain technical aspects related to diseases and vermin.

The survey of the larger lakes includes the following: studies on the distribution of the species of fish; the distribution of the larger plant areas or weed beds which are often correlated with the breeding and food habits of some of the more popular angling species of fish; studies of so-called predatory species of fish; a study of the plankton life, those microscopic free swimming or suspended organisms, which

form the essential food of all young fish and others of older growth; food studies of all the catches of fish taken; parasitism of the fish; pollution conditions as affecting fish life and food supply.

Some of the small lakes and ponds, especially those presenting special problems, are investigated. Some of these have been depleted, in some cases not so much through over-fishing, but through wrong stocking; e.g., some good trout waters have been stocked with predatory warm water species "in the hope of making better fishing."

At the completion of the field work on each watershed, it is customary for the director of the survey and the heads of the various units to present and discuss their findings at a public meeting of the interested residents of the region. These discussions are of mutual benefit to the members of the survey and to the sportsmen, game protectors and other interested individuals who attend. The complete reports of the survey of each watershed are published each year in a supplement to the annual report of the Conservation Department.

The fifth annual conference on the biological survey, held in Albany on March 11, 1931, was called by Commissioner Henry Morgenthau, Jr., '13. Plans were discussed for the organization of the field activities for the coming summer when the Oswegatchie and Black river watersheds will be surveyed. This area of about 3500 square miles includes the major portions of Jefferson and Lewis counties and the southwestern part of St. Lawrence and the northern part of Herkimer counties.



Courtesy of Ausable Lake Club

LOWER AUSABLE LAKE
The survey studies some of the small lakes

The Young Farmers Movement

By Donald F. Armstrong '33

LITTLE did the originators of the first Young Farmers Club realize the important step which they had taken. The idea was slow in starting, but when once under way, it spread rapidly, until now it is a nation-wide organization. Young Farmers Clubs and the Smith-Hughes Vocational Agriculture departments in the high schools are synonymous.

The first club of which there is any record, the original Young Farmers Club, was started in the agricultural department of the Union-Endicott High School, Endicott, New York, in the fall of 1920. The new teacher of agriculture, Mr. S. O. Salmon, Syracuse '18, realizing the lack of constructive organization among the boys in his department, conceived the idea and put it into operation. Three major departments were formed, namely, co-operative business, educational, and social. Among the first members of the club were Elton Tibbetts, Robert O'Neil, and Edgar Hyatt, all Cornell '27, and Howard Bradley, Syracuse '27. These boys, with the others, drew up a constitution and by-laws, set up a strict committee system, and elected officers. The club swung into action—buying and selling cooperatively, seed, baby chicks, fertilizer, nursery stock, and school supplies.

The club progressed smoothly, growing each year in objectives and projects. Our biggest year was 1927 in which we handled \$3500 worth of business, one third of which was in retail seeds. We handled two carloads of ground limestone, fertilizer, baby chicks, poultry, and orchard supplies. We owned a pure-bred Holstein bull for community breeding and carried on many other business activities. The most impressive point is that this work was all carried on by high school students in their spare time, strictly co-operative, acting through the committee system, and non-profit making. The reader is undoubtedly aware from the repeated "we" and "our", that the writer, as well as many other students now in the University, were members of the original club.

Our social activities included several "get-togethers", a Christmas party, and a Father and Son banquet. At this banquet we were addressed by many men of the agricultural college faculty and other important state agriculturists. Our educational activities included exhibits, debates, speeches, and the actual work of carrying on a strict cooperative. Bi-weekly meetings were held in accordance with Roberts Rules of Order, under strict parliamentary procedure. We also printed a bulletin, credited with being the first constructive piece of work carried on by any Young Farmers Club. This was financed by town business advertisements.

In June, 1925, at the State Agriculture Teachers' Conference, Mr. Salmon made recommendations for the establishment of a state-wide organization. These were not approved, due to lack of objective and enthusiasm. A year later, in 1926, recommendations were again made and accepted. The men in charge of Vocational Agriculture, Dr. A. K. Getman, Professor R. M. Stewart, and Mr. W. J. Weaver, with great foresight, sensed the potentialities of such a movement, and acted accordingly. At about this same time, another progressive teacher, Mr. Leon F. Packer of Albion, started a club, and the nucleus for another was laid at Bath. A temporary advisory council consisting of Mr. Salmon, Dr. Getman, Mr. Weaver, and Mr. Packer was appointed.

Plans were immediately formulated for the foundation of the New York State Association of Young Farmers Clubs, taking as a constitution the original one of the Endicott Club. At the State Fair in August, 1926, in conjunction with the banquet of Vocational Agriculture at the Hotel Mizpah, three delegates from each of the schools, Endicott and Albion, met and adopted the constitution, amended the by-laws, and elected officers. The writer was elected president; R. Abeligon of Albion, vice-president; R. Nesbitt of Albion, treasurer; and C. D. Cornell of Endicott, secretary.

Plans were formulated to build up the membership. As missionaries to the cause, we explained, assisted, and organized. At the second annual meeting at the State Fair in 1927, 22 clubs were represented. Paul Landon of Trumansburg was elected president; the writer, secretary and treasurer.

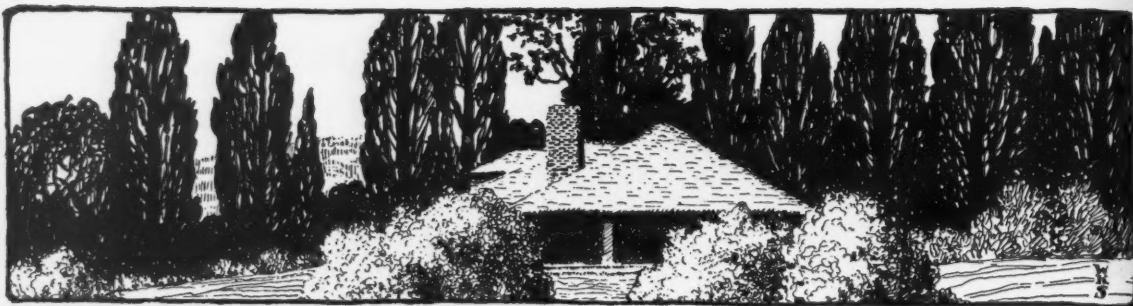
THE growth of the organization continued, fostered by a mid-year meeting held Farm and Home Week at Cornell. This meeting, first held in 1928, has come to be a custom. The supervisors in charge of Vocational Agriculture, realizing the increasing importance of Young Farmers Club work, impressed each department with the value of the club. At the end of the second year, we had 53 clubs enrolled, numbering 1600 members. Each local club was based on the original Endicott club, with variations to fit the individual circumstances. The advisory council was also changed to include Mr. Salmon as chairman, Dr. Getman, Mr. Weaver, and Mr. E. R. Hoskins, who was and is continuing to take a most active part in the work. The President of the Agricultural Teachers' Association and the Young Farmers' Association are members of this council. This council still holds office.

At the third annual meeting of the association at the State Fair in 1928 several important changes materially affected the entire organization. The movement was

going national. Without giving undue credit to the Endicott school and teacher, the Vocational Agriculture departments of many states had taken up the idea and formed a national organization, called the Future Farmers of America. At this meeting we decided not to affiliate with the national organization, but we could not restrain a feeling of pride at the growth of the movement. Another important factor was the sectionalizing of the state, and putting each section under a separate vice-president as a leader. This put someone into closer contact with the local units, gave assistance to newly formed clubs, and called for closer organization. The State Prize Speaking Contest caused much interest; a pre-requisite to trying out for the contest was a Young Farmers Club membership. Also the authorization to print a leaflet paper, four issues a year, carrying news from the clubs, aided in closer organization. The writer was elected its first editor. At this time, George M. Press of Forestville was elected president; the writer, secretary and treasurer for another year; and seven vice-presidents, one for each section.

ORGANIZATION began in earnest. The sectional system worked admirably, as this seemed to be the keynote of organization, and a section was just as good as its leader. Of 96 departments in the state, 92 had clubs at the end of the year. Another big factor was the establishment of the award system, the highest in the state being that of Empire Farmer, for exceptional ability along lines of vocational agriculture work. At the State Fair meeting in 1929, Howard J. Hill was elected president; Bruce Mack of Dryden, secretary and treasurer. The sections were increased to 11 and a vice-president was elected for each. We affiliated with the National Future Farmers of America, but retained our name of Young Farmers Club, of which we were justly proud. We sent two delegates to the national convention in St. Louis, H. J. Hill and Charles Pinkney '34 of Webster. They both received the degree of "American Farmer", the highest in the organization.

The work of organization was nearly complete, and now came the more important one of instituting constructive enterprises. The association had expanded to 4,000 members, included in 106 clubs. The present officers, elected in August, 1930, are David Wilcox of Fulton, president; W. Rothfuss of Webster, secretary and treasurer; and Olin Spencer of Homer, editor of the "Timer". Eleven vice-presidents were elected. Spencer and Rothfuss represented New York State at Kansas City at the Future Farmers Convention, each receiving the degree of "American Farmer." [Continued on page 169]



Through Our Wide Windows

Registration Racket

WE SAID last month that another long and tedious registration was over. If it is not too early to look forward to the next, let us begin thinking of one not so long and tedious.

As long as a great deal of Ag and Domecon registration is on the Ag campus, we would like to see all of it there. It seems ridiculous to stand such a long time in the Goldwin Smith line only to have your registration cards stamped and a few of them detached—the matter of a minute. Why could there not be another such machine to stamp the cards in Roberts Hall, or perhaps a special proxy system for these two colleges? Then after standing in the one line, you could get other necessary materials right there. That would eliminate one line at Goldwin Smith, thus hastening Arts Registration as well as our own.

Why must Domecon, being now and independent college, lengthen the already long Ag line by 550 students? We would like to suggest that if the "fair femmes" must get their study cards personally at Roberts, they be given an extra office. This would eliminate much wasting of every one's time while the other college is being waited upon. Congestion might be further relieved by not requiring each individual to sign up for courses with unlimited registration. Most freshmen have to take Chem and they all eventually get signed, so isn't it a waste of time to stand three hours waiting to "sign on the dotted line"?

Failing these remedies, we suggest that comfortable chairs be—no, there wouldn't be room for them in a registration line. Well, anyway, let's have some kind of entertainment to pass away the hours after the salesmen run down.

United States Timber Conservation Board

WITHIN THE last decade interest in forestry has increased to a very considerable extent among the American people. The realization that the economic independence and stability of our nation rests largely on our natural resources has given forestry an impetus unknown before in our history.

The latest step is of national scope and is enthusiastically endorsed by the industrial leaders of the United States. President Hoover's appointment of the United States Timber Conservation Board is a long awaited event. Since the Conservation Commission set up by President Theodore Roosevelt made its survey of the resources of the nation, foresters throughout the country have hoped for such a body as the Timber Conservation Board. Although tardy, it is here and it will not be long before its benefits will be felt throughout the country.

The primary purpose of the Board is to conduct an economic survey of the timber resources and the logging and lumbering conditions in every part of the country. The survey will cover both privately and publicly owned forest land and take into consideration all the influencing factors.

The work of the Board cannot be completed for several years but as it progresses we can be sure that the data collected will point the way to saner and fairer forest policies.

World Wide Agriculture

MODERN means of communication and transportation, new inventions of machinery, information of the press, and international congresses of all kinds, serve to make the statement that "we do not know how the other half lives" less true than in former years. Perhaps disarmament and peace congresses, so far at least, seem to have accomplished little good if we consider that the nations of the world are now spending more on armies and navies than before the World War. But there are other types of congresses that cannot help but produce beneficial effects for the nations.

So it is that we are more than glad to make the announcement of the Fifteenth International Congress of Agriculture at Prague, Czechoslovakia, June 5 to 8, this year. This congress meets every two years in different countries under the auspices of the International Commission of Agriculture. It is to be urged that as many of the agricultural leaders of our country attend this meeting as possible. Any steps that may be taken to relieve the economic stress between nations will be of more lasting benefit than all the so-called peace conferences yet held.

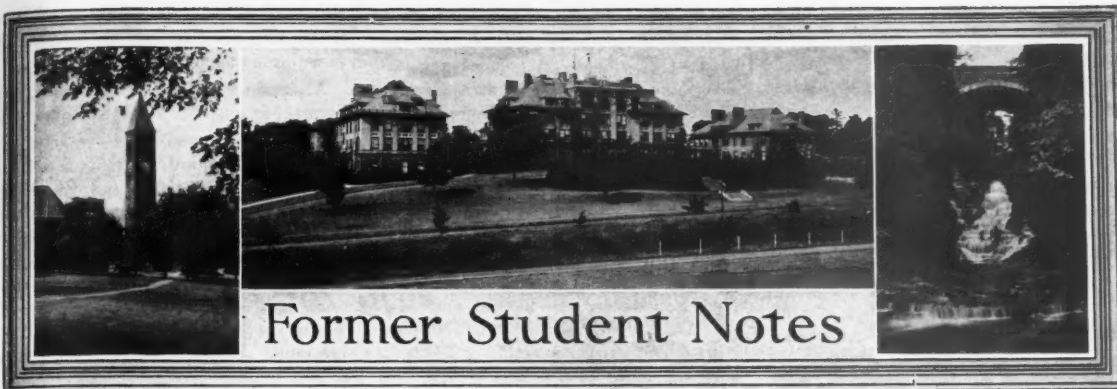
The program this year is separated into seven sections. Agrarian policies and rural economy, agricultural education and extension, agricultural cooperation, vegetable production, animal production, agricultural industries, and "the rural woman" will be topics of discussion. Problems of efficiency of production, equilibrium between supply and demand, the importance of research, agricultural cooperation, and the rural family will receive special attention. It is gratifying to us to note that the "mission of the woman in the struggle against the rural exodus" will be one of the principal topics. History has repeatedly proven the necessity of a strong rural population; poets have sung of the "sturdy peasantry"; and now, within the last few years, leaders of thought in all fields have come to realize that as the rural communities deteriorate or advance, so does the nation respond in its life. Let America send her best minds to consider important problems.

Staff Elections

JOHN B. TUTHILL '32, of Binghamton, was elected editor-in-chief of the CORNELL COUNTRYMAN at the recent meeting of the board of directors of the magazine. Kate G. Rogers '32, of Tompkins Corners, was selected as managing editor. Frank T. Vaughn '32, of Plattsburg, will serve as editor of the Campus Countryman page. The editors of the Domecon Doings page and the Cornell Foresters page will be selected at the end of a short competition of the associate editors.

Richard Pringle '32, of Mayville, will assume the duties of business manager. Assisting him will be James E. Rose '32, of Hobart, as circulation manager; Norman C. Kidder '32, of Warren, Pennsylvania, as local advertising manager; and Leonard M. Palmer '32, of South Westerlo, as national advertising manager.

THE CORNELL COUNTRYMAN wishes to do four things: publish interesting alumni notes, furnish campus news, present the latest agricultural information and stimulate boys and girls to seek the aid of their State Colleges in order that they may lead fuller and finer lives.



Former Student Notes

'88

Albert E. Metzger, vice-president for eighteen years of the Fletcher Savings and Trust Company in Indianapolis, died on January 31 at his home there, after a long illness. He was born in Indianapolis 65 years ago, the son of Mr. and Mrs. Alexander Metzger. He was a member of Alpha Tau Omega, Congress, and the Agricultural Association. He was the organizer of five large banks in Indianapolis, and was formerly president of the German-American Trust Company. He was also active in building enterprises. Mr. Metzger was also interested in civic affairs, being one of the founders of the Indianapolis Boys' Club and a member of the Board of Governors of the Board of Trade. He was a member and first president of the Cornell Club of Indianapolis. His widow, Mrs. Frances Mueller Metzger, two sons and two daughters survive him.

'89

Dr. Bertis R. Wakeman is district health officer in Hornell, New York. His address is 5 Hakes Avenue.

'94

Harry D. Gibbs is a consulting chemist in Washington. His address is 1520 H Street. His eldest son plans to enter Cornell next fall.

'98

Charles H. Blair has retired from the firm of Smith and Gallatin and on January 1, became a member of the firm of Jacqelin and DeCoppet at 47 Broad Street, New York. He has continued his membership in the New York Stock Exchange.

'99

Louise W. Katz, cataloguer in the Hoover War Library at Stanford University died suddenly on January 9, following a stroke of apoplexy. She was born July 31, 1867, the daughter of Mr. and Mrs. Robert I. Katz. She received the degree of B.S. in 1900 and was a member of Kappa Alpha Theta.

'05

J. Eliot Coit is head of the Coit Agricultural Service in Altadena, California, which furnishes scientific management

and supervision, pruning supervision, and appraising to fruit growers and farmers. He has been professor of horticulture at the University of Arizona and professor and head of the department of citriculture at the University of California.

Ray C. Simpson has sold his interest in the Simpson Nursery Company in Monticello, Florida, to his brother, and now divides his time in Albany, Georgia, where he has a peach and pecan orchard, Winter Haven, Florida, where he has an orange grove, and Monticello.

'06

Harvey L. Westover is senior agronomist in charge of alfalfa investigations with the United States Department of Agriculture. During 1929 he was engaged in plant explorations for the Department in Russia, Germany, France, Italy, Austria, Hungary, and Poland, and last year in Spain and North Africa. His address is 4220 Thirty-eighth Street, Washington.

'11

Thomas Bradlee, director of extension at the University of Vermont, died suddenly on the night of February 21, 1931. He was stricken while officiating at the annual college "Kake Walk" in the University gymnasium. Professor Bradlee was born at Lewiston, New York in 1885. He came to Cornell and entered the College of Agriculture in the fall of 1907. While at college Professor Bradlee was active in student affairs. He was business manager of the CORNELL COUNTRYMAN, rowed on the ag college crew, served on the Class Book committee, was a member of the class rush committee and the Ag Banquet committee. After graduation in 1911 he taught agriculture at Smith's Agricultural School at Northampton, Massachusetts for two years, then he was appointed director of extension at the University of Vermont which position he held at his death.

'12

Thomas J. H. Grenier is associated with the Fairmont Creamery Company in Buffalo. He lives at 153 Grandview Street.

Edwin P. Smith is a farmer and produce dealer in Sherburne, New York. His wife was formerly Gertrude I. Howard. They

have five children, Howard, Leah, Jean, Charlotte, and Marie. Mr. Smith is now president of the Alumni Association of the College of Agriculture.

A. H. White is now working for the Horace Waters Company of New York City, makers of Waters Pianos. "Al" was editor of the COUNTRYMAN in his senior year.

'13

Ralph H. Denman is supervisor of rural service of the New York Power and Light Corporation, at 124 State Street, Albany. He lives in Delmar, New York. He has two daughters, Marjorie, aged 11, and Pauline, aged 10.

'14

Harold K. Hovey is a newspaper advertising salesman. His address is 31 Hermosa Avenue, Long Beach, California. He has two sons, aged six and two.

'15

Dr. S. W. Frost has been employed as associate professor of entomology at Pennsylvania State College for the past eleven years. Recently he has made trips to Haiti, Panama, and Florida conducting research on insects.

'20

Dorothy M. Button, now Mrs. C. A. Ryder, lives at 150-01 88th Avenue, Jamaica, New York. She has a son six years old.

James R. Robinson is completing his fifth year as principal of the High School in Cassadaga, New York. He also instructs in agriculture.

Francis J. Oates is president of the Chenango Ice Cream Company and a partner in the Norwich Coca Cola Company in Norwich, New York. Mrs. Oates was Lillian Carmer '22. They have two children, and live at 12 Conkey Avenue.

'21

Arthur L. Clark is with the editorial department of the National Sportsman, Incorporated, at 108 Massachusetts Avenue, Boston.

Helen Marsh is manager of the Yellow Lantern Cafeteria at 3443 Walnut Street,

Philadelphia, Pennsylvania. Clara Loveland '22 is assistant manager. Miss Loveland and Mary E. Hershey '22 went around the world last year, visiting twenty countries.

'22

A son, George Quincy, Jr., was born on September 19, 1930 to Mr. and Mrs. George Q. Lumsden. They live at 65 North Fullerton Avenue, Montclair, New Jersey.

'23

J. S. Hathcock is now living at 1401 Shirley Street, Columbia, South Carolina.

E. W. Hoffman has temporarily left his position as 4-H Club agent of Tomp-

kins County to go to a sanitarium at Upper Lake.

Mrs. Raymond W. Newberry (S. Josephine Metcalfe) lives at 6 Caroline Road, Douglaston Park, Long Island, New York. Mr. Newberry graduated from Yale in 1921 and is with the Spencer Trask and Company. They have two children.

Albert F. Hauptfuhrer is a purchasing agent with the Castles Ice Cream Company of Perth Amboy, Newark, and Garfield, New Jersey. He lives at 1118 Melrose Avenue, Melrose Park, Pennsylvania.

Francis I. Righter is now a geneticist with the Eddy Tree Breeding Station in

Placerville, California. He is working on the development of superior strains and varieties of commercial trees.

A daughter, Elisabeth Josephine, was born to Mr. and Mrs. Henry G. F. Hamann on August 10.

Lowry T. Mead, Jr., a year ago left the Public Service Electric and Gas Company in Newark, New Jersey and is now assistant to the vice-president in charge of sales of the National Cash Credit Association, a personal finance chain organization, with offices at 40 Journal Square, Jersey City, New Jersey. He lives at 3 Lawrence Avenue, West Orange, New Jersey.

A son was born on March 29 to William D. McMillan and Mrs. McMillan (Ruth V. Rice). They live at Sunny Gables, Inlet Road, Ithaca.

A. J. Powers of the laboratory of the Borden Farm Products Company, stopped here recently on his return from a conference of the laboratory section of the International Milk Dealers association which was held in Geneva. He interviewed one of our seniors relative to a position with the Borden Company. He was accompanied by R. T. Raymond '24, also of the Borden Company.

Nathaniel E. Winters is now head of the department of agronomy at the Oklahoma Agricultural and Mechanical College. He lives at 216 Duncan, Stillwater. He was for five years cotton specialist with the Department of Agriculture of Argentine.

Forrest E. "Woods" Mather is manager of the McDonald and Crocker Farms, in the Cortland Valley. They have four farms with a total acreage of over 700. They have a large herd of pure bred Guernseys, about 2,000 Rhode Island Red hens, and lots of turkeys. He keeps his breeding turkeys in close confinement and uses artificial light to make them lay earlier in the spring. He hatched some turkeys as early as the first of April this year. "Woods" says the four farms are operated as separate units except at certain times when they combine to get their work done. "Woods" address is R. F. D. No 1, Cortland, New York.

'24

A daughter, Frances Louise, was born to William A. Carran, Jr., '26 E.E. and Mrs. Carran (Marguerite L. Pigott), on October 11. Their address is 17829 Canterbury Road, Cleveland, Ohio.

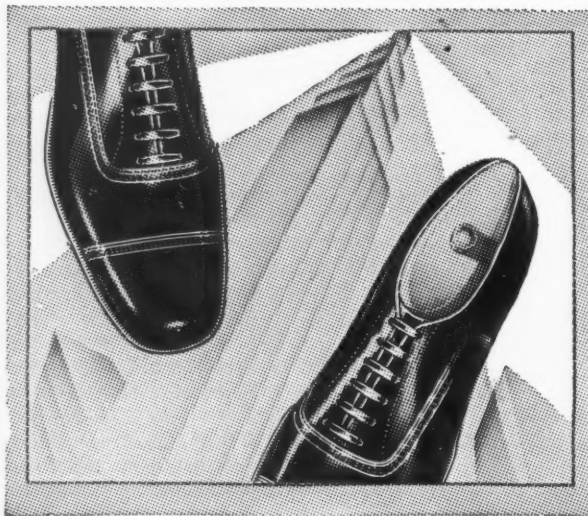
Marian DuMond was married recently to G. W. Gunning. They are living at 133 Prospect Place, Brooklyn.

Mr. and Mrs. D. J. Wickham announce the arrival of their second son, David Miner, on March first. Don is farming at Hector, New York, specializing in grapes, peaches, and alfalfa. He has a large herd of high producing Holsteins. As a side line, a gas station business of more than average volume, adds to the income of this progressive Schuyler County farmer.

Martha M. Signor was married to Dr. Robert Allen Bier on September 20.

Bostonians

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BUTTRICK & FRAWLEY

INCORPORATED

134 EAST STATE ST.

ITHACA, NEW YORK

They are living at 1840 California Street, North West, Washington.

Christopher J. Welz M.S. '24, Ph.D. '26, is with E. I. du Pont de Nemours and Company in Flint, Michigan. He lives at 237 Stockdale Street.

'25

Ray S. Ashbery has held the position of Cornell University Alumni Field Secretary since last September. Ray recently went out on his fifth trip, going as far north as Duluth and west to Omaha and in all covering fourteen cities. Since holding his new position he has made trips covering much of New York State, New Jersey, and New England, speaking at many meetings where he has met with marked success.

Charles C. Carter, who is a builder of golf courses, has been taking the winter course at the Massachusetts Agricultural College. His permanent address is care of Douglas Kirk, B Avenue East, Cedar Rapids, Iowa.

Franklin F. Muller is a poultry breeder at Box 86 R. D. 7, Ithaca. A daughter, Joan Lavot, was born on January 15. They have a son Enrique Keutsch, 2nd, who is one and a half.

Leo B. Roberts is, head of the chemistry and physics department at the Emory Junior College in Valdosta, Georgia. He received his Ph.D. here in '28.

'26

James E. Frazer now lives at Apartment 52, 4611 Spuyten Duyvil Parkway, Bronx, New York. He is teaching at the Birch Wathen School in New York.

Rudolph T. Termohlen is with the Lowden Machinery Corporation. He is living at the Hotel Montrose in Cedar Rapids, Iowa.

'27

Ernest A. Bradley is working his father's farm in Silver Springs, New York.

Everett H. Clark on November first became county agricultural agent of Wyoming County, New York. His headquarters are in Warsaw. For the past year and a half he had been assistant agent in Oneida County.

Mrs. Herbert G. Comstock (Ruth E. Bois) is home demonstration agent of Yates County New York. Her address is 202 Liberty Street, Penn Yan.

Mrs. Henry B. Miller (Helen E. Grant) is food director at Balch Halls, Cornell University. She lives at 315 Thurston Avenue.

Willoughby H. Walling is a forest supervisor in the forestry branch of the United States Indian Service. His address is care of the Service at Mecadero, New Mexico.

Ruth E. Matz is dietitian at the Reading Hospital in West Reading, Pennsylvania.

Leon E. Bowe is with the fixed nitrogen research laboratory, of the United States Department of Agriculture in Washington. He lives at Apartment 709, 2115 F Street.

Verlee O. Linderman is teaching vocational agriculture at Sherman High School, New York.

James L. Newcomb is on the staff of the Hotel Tensgate in Boston.

Irene Claire Reese, formerly of 104 College Avenue, Ithaca, New York, was killed in an automobile collision on the Washington Boulevard near Laurel, Maryland, January 25. Miss Reese had been employed in the Bureau of Home Economics at Washington since September, 1929.

Lawrence O. Taylor was married on September 6 to Marian Koppe of West Middlebury, New York. Formerly both were teachers in the Perry School, New York. Mr. Taylor is now in charge of animal husbandry in the New York State School of Agriculture in Delhi, New York.

'28

John Ehrlich is a graduate student in botany and forest pathology and an Austin Teaching fellow in botany at Harvard University. He is investigating forest disease in the Maritime Provinces of Canada. His address is Perkins Hall 28, Cambridge, Massachusetts.

It always pays to start them on this

OATMEAL FEED



QUAKER FUL-O-PEP *Chick Starter*

THE QUAKER OATS COMPANY
CHICAGO, U. S. A.

It's real economy to feed Quaker Ful-O-Pep Chick Starter during the first six weeks after chicks hatch. Then Ful-O-Pep Growing Mash should be used to continue their rapid growth and development.

Any chick worth growing is worth giving the right kind of a start. Future production and profits depend upon the development of the bird during the first few weeks after hatching. Years of experimentation have repeatedly proved the superior value of oatmeal in chick starter. Ful-O-Pep Chick Starter contains a generous quantity of pure oatmeal. Cod liver meal, cod liver oil, mo-



lasses, essential proteins, minerals, and selected grain products have been added to make it a complete, balanced feed. Ful-O-Pep Poultry Feeds are sold by Quaker Dealers.

BUY QUAKER FEEDS IN STRIPED SACKS

L. M. Freeland is selling florists supplies for the M. Rice Company.

Kakumara Kemmotsu is associated with the Nara Hotel in Nara Park, Japan. This hotel is owned by the Japanese Imperial Railways.

Richard H. Kramer is with Morrison and Townsend at 37 Wall Street, New York. He lives at 325 East Thirty-second Street, Brooklyn.

Albert J. McAllister was recently appointed assistant manager of the Hotel Montrose in Cedar Rapids, Iowa. The hotel is owned by the Eppley Hotels Company, with which he has been associated since leaving Ithaca.

Reynold A. Aymar is now plant specialist with the Maule Seed Company at 1220 Spring Garden Street, Philadelphia. The Maule Company is owned by the W. A. Burpee Seed Company.

Harden Gibson and Barbara Neff were married December 29, 1930. Barbara has left the Buffalo Museum of Sciences and is now teaching junior and senior high school science in the Hartford, New York, Central School. They are living in South Hartford, where Harden is working on the home farm.

Wayne E. Foster is farming with his father at Cherry Creek, New York. They have 50 purebred Ayreshires.

'29

'30

Dorothy M. Lewis is assistant manager of the Park cafeteria in Harrisburg, Pennsylvania. She lives at 1931 Bellevue Road.

Robert D. West is a salesman for the Penn Mutual Life Insurance Company with headquarters in Chicago. He is living at home in Elgin, Illinois.

Mildred Strong and Ralph W. Gifford were married at Forest Home on February fourth. They are living in Ithaca. Gifford is a senior in veterinary medicine.

Harriet L. Thompson is teaching homemaking in the Odessa, New York, High School. She is engaged to Percival G. Barber.

Stanford C. Bates is manager of a Grange League Federation store at Schenevus, New York. "Stan" was a former editor of the COUNTRYMAN.

Madelyn L. Davis is manager of the Park Cafeteria in Harrisburg, Pennsylvania. She lives at 1931 Bellevue Road.

Dorothy Dietzen is teaching textiles and clothing in the Morrisville Agricultural high school. She visits Ithaca on occasional week ends and was here for farm and home week.

Ida L. Harrison is teaching homemaking in the Canaseraga, New York, High School.

R. F. Mapes is working in the commercial department of the New York Telephone Company. He is living at 401 Elmwood Avenue, Buffalo, New York.

W. D. Norton is teaching agriculture and algebra in the Mannsville high school at Mannsville, New York.

H. F. Teute is now carrying on a florist's business in partnership with his father, Hugo Teute, Rochester, R. F. D. 24, New York.

"Hal" Travis is now in Philadelphia working for Burpee's Seed Company. His address is 4700 Sansom Street, Apartment A8.

Abram V. Tunison is fish culturist in charge of nutritional experiments, in Unionville, Connecticut. He was married on August 9.

Benjamin F. Webber is horticulturist at a country club in Philadelphia. He lives at 218 Crawford Avenue, West Conshohocken Pennsylvania.

Willard A. Van Hieningen is living at home and is working in his father's nursery at South Wilton, Connecticut.

Richard "Dick" Churchill is managing Churchill Farms Incorporated. His address is Box 116, Westwego, Louisiana.

Mildred A. Pratt was married October 27 to A. L. Barter who is employed in the American Telephone and Telegraph laboratory in New York City. Their home will be in Verona, New Jersey.

E. B. Pattison has been appointed extension instructor in the department of farm management. Mr. Pattison will have charge of correspondence courses in farm management and marketing. He is living at 214 Thurston Avenue.

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is a part of the mash formula. Diamond is the one ingredient that richly supplies both protein and Vitamin A to the starting, growing or laying mash. Vitamin A stimulates growth, and the vegetable protein (40%) provided by Diamond means an economical replacement for part of the animal protein in your mash.

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Undergraduates who have read this, can paste it in their hats for future profits



Guaranteed

Hazel E. Reed is teaching textiles and clothing in the Senior High School in Oswego, New York. She lives at 123 West Fifth Street.

Jeanne E. Smith is teaching home economics and physics at the Carmel, New York, high school.

G. A. Rathjen is working in Saltford's Flower Shop at Poughkeepsie, New York.

Protein Experiment

(Continued from page 259)

A 16 per cent total protein concentrate mixture with No. 2 medium timothy clover mixed hay and corn silage as roughage will give as high production when fed at the rate of one pound of grain to each three and one-half pounds of milk produced as a 20 per cent or a 24 per cent total protein mixture.

The average production in the experimental herd was about 10,000 pounds of milk. Thus, the cows were fed about 3,000 pounds of concentrates. The difference in the cost of 3,000 pounds of 16 per cent and 3,000 pounds of 24 per cent is six dollars. This figure is not very large when only one cow is considered but is very significant when considered in terms of several thousand cows.

Another very important factor is the amount of high protein ingredients required to supplement home-grown grains. This fact should stimulate dairy farmers to produce more home-grown grains and thereby reduce the amount of concentrates necessary to purchase.

We are now in the third year's work of this experiment. If this third year's work substantiates the work of the first two years, this experiment will undoubtedly have a marked influence on the feeding of dairy cattle in this State.

The Young Farmer

(Continued from page 163)

As a challenge to the former Young Farmers Club members now registered here in the College of Agriculture, I suggest that we organize still another club, among the many already here, and call it the "Young Farmers Club", a worthy project, and one of which we can be justly proud in the undertaking.

The objects of the Young Farmers Club are to teach cooperation, by actually cooperating, in conjunction with the vocational agriculture instruction. It is based on the idea of working together in everyday proceedings, not in a philosophical light. Young Farmers Club work, in conjunction with academic pursuits, teaches cooperative business method, committee operation, parliamentary law and procedure; it acquaints the student with doing things by actually doing them, develops a sense of leadership in the growing boy, and lastly, better prepares him to take his place in later life, among the problems and perplexities of modern agricultural business. The members go out into life far better equipped and prepared than those who have gone before them.

His address is care of Saltford's Flower Shop.

Stella C. Smith is teaching domestic science in the Bainbridge, New York, High School.

Josephine L. Steele is teaching home economics in the Great Barrington, Massachusetts, schools. She lives at 81 Tacomac Avenue.

James A. Morrison is working in the William Penn Hotel in Pittsburgh, Pennsylvania.

William C. Stitzel is assistant sales manager of the York Paint and Hardware Company of York, Pennsylvania. He was married in Baltimore on September

20 to Miss Marjorie Haines, daughter of Mr. and Mrs. William R. Haines.

Leroy D. Lamb has charge of the laboratory at the Hanover, Pennsylvania, branch of the Fairfield-Western Maryland Dairy. He lives at 1 South Street.

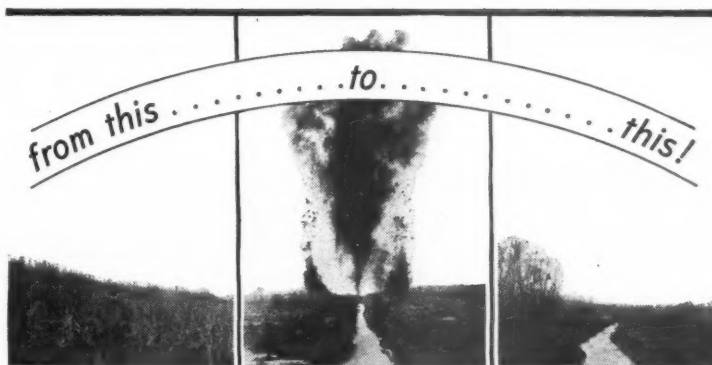
Erma Linderman is associate county club agent for Genesee County, New York, with headquarters in Batavia.

Eloise Lueder is with the home bureau in Rochester. Her address is 82 Chili Avenue.

Louise M. Marks is teaching home-making and biology in the Lake Mahopac High School in Mahopac, New York. She lives at the Baxter House.

DYNAMITE REMOVES FARMING HANDICAPS!

6½ SECONDS



A HAND turns the switch on an electric blasting machine. Boom! The explosion! And—in 6½ seconds—there appears before your eyes a straight, clean ditch through which the water begins to flow.

It is du Pont Ditching Dynamite — at work! Of course, 6½ seconds is not all the time it takes you to blast a ditch. You have to lay out the line of the ditch, determine the number of charges and load. But, even so, digging with Dynamite is by far the quickest, easiest — and cheapest way to get the kind of ditches you want.

Detailed information about cleaning out old ditches, blasting new ones and changing channel streams is contained in a booklet, *Ditching with Dynamite* — published by the du Pont Company.

This booklet shows you methods of blasting and describes the outstanding qualities of du Pont Ditching Dynamite—the most effective explosive for ditch blasting. You will find this booklet valuable while you are still

in college—and afterwards. Write for your free copy.



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Explosives Department, Wilmington, Delaware



We Have The Answer!

EVERY woman needs a cream to guard her face from lines and wrinkles. But if your skin is inclined to be oily or if your face is plump you hesitate to use a rich cream. Dorothy Gray Tissue Cream will solve that problem. It is a nonfattening emollient, made especially for plump faces and oily skin.

\$1.00, \$1.75 and \$2.75

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with Caps and Gowns*

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Devoted to
Local
Events

The Campus Countryman

Around the
Top of
"The Hill"

Volume XII

Ithaca, New York, April, 1931

Number 7

CORNELL'S RADIO STATION HEARD OVER WIDE AREA

CORNELL station WEAI is heard over an area having a population in excess of two million, according to Professor Charles A. Taylor, director of agricultural programs. Radio listeners have reported hearing the station in Vermont, Massachusetts, Connecticut, New Jersey, Ohio, Pennsylvania, and Michigan. Programs are received consistently from the immediate vicinity of Ithaca to the farthest end of Long Island and north into Canada, and from the highlands of the Catskills to the middle of Pennsylvania. Within a period of six weeks about 400 messages were received from people who had heard the programs. The total number of radios in this area is not known nor is there an accurate indication of the number of people who listen to WEAI but the department has reason to believe that its listeners number in the thousands. More than 1200 replies were received from a single program.

"Every graduate of the College of Agriculture and Home Economics will find it necessary, sometime in the course of his life to broadcast, which being the case, it behooves each one of us to get some experience where there will be people listening who will tell them their faults. The only way to gain by this experience is by honest criticism and help," says Professor Taylor.

The Cornell University transmitting station is on the college poultry farm, two miles from the Library tower. Parts of the programs are picked up from studios and halls in different parts of the University campus, such as the main studio in Sibley Hall, the Waite Avenue music studio, Sage Chapel, Bailey Auditorium, and Roberts Assembly.

Used as Extension Instrument

The station is run primarily for practise purposes in public speaking, dramatics, music, and electrical engineering. In the College of Agriculture it is an extension instrument. The principal studio is in West Sibley. Outside of Sage Chapel, a microphone in the shape of a small square box placed on the urn, picks up the music from the chimes, 'midst the rattle of old Ford cars and the plaints of students on their way to the noon repeat. Organ recitals are also transmitted from Sage Chapel, and Bailey Hall. The department also broadcasts on 18 outside stations. From three to fifty manuscripts are given on different outside stations, the number depending upon the relationship between the station and WEAI. Programs are issued every three months and sent out to those who want them. There are about 100 speakers a month on this station.

Radio engineers have estimated that the normal distance for a station of 1000 watts and 1270 kilocycles, which applies to this station, should average from 109-125 miles. The great distances reached by this station are believed due to efficiency in technical operation. Rev. E. A. Bachelder of Negaunee, Michigan, reports satisfactory reception at a distance of nearly 700 miles from Ithaca.

Although the entire schedule of programs for the second term has not been completed, these are some of the daily features being arranged: Mondays—radio drama, and talks by members of the

"C" MEN

A. B. Butler '30
O. D. Carvalho '31
E. W. Coppage '32
R. C. Crosby '31
B. S. Cushman '30
B. H. Detwiler '30
C. Dogny-Larco '32
F. G. Dulaff '30
D. F. Eckert '32
E. W. Guthrie '31
L. M. Handleman '32
M. P. Homan '30
I. H. Hulse '30
G. E. Kappler '32
A. LaFrance '30
S. R. Levering '30
L. H. Levy '30
R. W. Lewis '30
F. A. Lueder Jr. '31
E. Madden '31
A. F. Martin '32
J. R. McKowne '30
P. J. McManus '32
H. V. Moon '30
E. B. Pattison '30
O. B. Schoenfeld '32
H. E. Schultz '31
J. R. Shields '32
K. B. Trousdell '30

home economics staff and the department of languages; Tuesdays—special musical features, including programs by the University orchestra, glee club, and band; Wednesdays—talks on nature subjects, art appreciation, home economics, and music; Thursdays—music appreciation, scientific research, news; Fridays—organ recitals, talks on engineering subjects, athletics, and home economics.

New Equipment Installed

Much improvement in equipment for broadcasting has been installed this year. Cables have been run from the transmitting station to the main studio in West Sibley Hall, and from there to Bailey Auditorium, Roberts' Assembly, the Waite Avenue Music Studio, and Sage Chapel. The technical facilities of the studios and the transmitting station have been much improved. The authorization of the increase in power marks it as a year of much progress.

Some of the most pressing physical needs at present are an extension of lines to other points on the campus. A main studio segregated from disturbing noises and where studio activities will not interfere with classes is a necessity.

The station is under the supervision of Announcer Roger B. Russell, and Professor Taylor.

The National Flower Show at Cincinnati, Ohio, was attended by Professor A. E. White, Mr. Kenneth Post, and Mr. J. C. Ratsek of the department of floriculture, George Kern '31, Henry "Hank" Clapp '31, and Milton "Jack" Batchelor '31. The Cornell group attended the meetings of the college section of the Society of American Florists and Ornamental Horticulturists and the bi-annual meeting of Pi Alpha Xi, of which Professor White was the retiring president. Many experts considered this year's floral exhibits some of the best that have ever been produced in this country.

FOUR STUDENT CLUBS SEND DELEGATES TO CONFERENCE

DELEGATES from four student clubs in the Colleges of Agriculture and Home Economics attended the preliminary conference of Collegiate Country Life Clubs held at Kalamazoo, Michigan, March 6 to 8. Josephine Collins '33 represented the University 4-H Club; Dorothy English '32 the Ag-Domecon Association; Richard Pringle '32 the Round-Up Club; and Charles Pinkney '34 the Vegetable Gardening Club. They were accompanied by A. W. Gibson '17, Associate Secretary of the College of Agriculture.

The meeting was for the purpose of planning the program for the Student Section of the American Country Life Association Conference to be held at Cornell University, August 17-20, 1931. Over eighty student delegates attended the conference, representing 18 colleges and universities in the middle western, southern, and eastern sections of the United States.

The theme of the general conference in August will be "Rural Government". The students at the Kalamazoo meeting decided to limit their section to a discussion of "local rural government", with each delegate making an attempt before the conference to familiarize himself with the organization and administration of his own local unit and some of the problems facing it.

Cornellians to be Hosts

Cornell students interested in rural life and in the problems of rural government have the unusual opportunity, during this conference, of acting as hosts to a large group of students from other colleges and universities at a time when the natural advantages of the Finger Lakes Region are at their best, and when university work will not interfere.

All interested students, who can possibly do so, should plan to return for the conference. The organization of the student program will be entirely in the hands of our students, according to the general plan outlined by the Student Advisory Committee of the American Country Life Association. There will be work for all to do, and a large number must be on hand in August to assure the proper reception of our guests, as well as to take advantage of a very worthwhile conference.

The program as outlined will include participation in the general conference to the extent of attending the more important speeches on topics related to the theme of the student section. Separate discussion periods, some special speakers on local rural government, and student luncheon and dinner meetings will keep the students' section of the conference generally free for a real conference of students, where every delegate has a chance to participate, with a minimum of attendance at formal speeches.

The meeting at Kalamazoo was held at Western State Teachers College. Students and faculty members combined in a cordial reception to the visiting delegates, setting a standard of good fellowship in this preliminary conference, which will require our whole-hearted effort to equal next August.

AGRICULTURAL OUTLOOK ISSUED BY FARM MANAGEMENT OFFICE

NEW YORK FARMERS must practice the closest economy during most of 1931, but conditions should improve somewhat during the last half of the year, according to the *New York State Agricultural Outlook* for 1931, prepared by Professors M. C. Bond and L. E. Cruikshank '27 of the farm management department. The bulletin gives a summary of conditions at the present time and the prospects for the remainder of the year.

In December 1930, the prices of farm products in New York State were about 25 percent lower than in December 1929. The price of feed and the wages of farm laborers are lower than a year ago, but there has been no proportional decrease in the prices of the other things that farmers buy. Taxes and interest have changed little.

Minor adjustments to the spread between wholesale and retail prices of farm products can be made, but farmers should be cautious about making radical changes in their crops or their methods of farming. There is danger that too many farmers will plant increased acreages of such crops as potatoes and beans, forgetting that the relatively high prices of these products are the result of the drought of last summer. Farmers also may reduce their poultry flocks too much, forgetting that the low prices are partially due to the exceptionally early hatching last spring and the mildness of the winter in some of the egg-producing sections.

The present situation probably will not affect New York farmers so seriously as farmers in most parts of the country. Wheat and cotton farmers and others who have been dependent on a foreign market, and producers farthest from market will find their margin of profit narrower.

Dairy Prospects Reviewed

Even though competition continues to become keener for the New York dairyman, he is likely to find it a relatively more profitable source of income than many farm products, largely because of the rigid requirements of the markets that give him a marked advantage in the sale of fluid milk and sweet cream. Western cream is cutting in on the markets somewhat seriously, but so far fluid milk has not been admitted.

Milk production is a long time business, and changes take place slowly. A great effort should be made to increase efficiency of operation, and thus lower the cost of production per hundredweight. Careful culling of the herd, feeding according to production, proper selection of feeds, purchases of feeds in quantity, with discounts for cash, and arrangement of work to reduce labor costs, are especially important.

Poultry returns may be unsatisfactory now, but the *Outlook* sees no reason why poultry may not continue to pay relatively well over a period of years.

Sheep cannot compete with cows in fluid milk regions, but there are some sections in the state where there is still a place for sheep, if there is ample pasture and cheap feed.

Hog production in New York is limited largely to the utilization of wastes and by-products, and production for home use is likely to become more profitable.

Prices of horses will probably rise enough to justify the raising of a limited number of colts this year and next.

Fruits and Cash Crops Studied

New plantings of apples should be confined to well drained soils and sites that are well adapted to apple growing. As with other products it is becoming more

and more important to produce efficiently. Competition has lowered the margin of profit on peaches and pears, and cautious planting and efficient production should be stressed with both fruits.

More efficient production of profitable vineyards, and abandonment of those that will not return a profit, will be necessary in grape production.

Conditions do not warrant an increase in the acreage of potatoes in the state, but for those who can produce efficiently, they will continue to be a relatively profitable crop. New York growers can best meet the increasing competition from other states by planting on the better potato soils, by practicing cultural methods that have a direct bearing on market quality, and by better grading. The trend, according to the department, is toward large scale machine production.

Cabbages are profitable in New York, under the right conditions, and should continue to be, but there is no justification for any material increase in acreage. Neither should there be any marked change in the acreage of beans for 1931. The bulletin also advises against expansion in onion and carrot acreages.

On the average, grain crops, such as oats, barley, wheat and buckwheat, have not paid anything for the time spent on them in this state. Grain can be produced cheaper in the Middle West and shipped into the state and sold at a lower price than the cost of raising it here. Some grain will continue to be necessary on many farms to fit in with the farming system.

The market for timothy hay has been steadily declining and probably will continue to do so. Alfalfa and clover hay, however, are profitable enterprises.

Credit and Labor Advice Given

Credit is likely to become harder to get. Farmers should present credits statements to their bankers and make use of bank credit instead of store credit. The Federal Land Bank is still making long time mortgage loans on good farms.

Labor is lower but has not declined nearly so much as farm prices. The same is true of farm equipment, building materials and supplies, though present prices may justify building in some cases.

POULTRY PROF IS SPEAKER

The Cornell poultry department was represented at the Baby Chick Show and Convention held at Batavia, New York on March 6 and 7. Professor G. F. Heuser '15 took the place of Professor J. E. Rice '90 as the chief speaker at the Poultrymen's Banquet in the Hamilton Hotel on Friday evening, March 6. L. M. Hurd and R. C. Ogle, extension specialists of the poultry department, were the judges at the Show, which was held at the Fair Grounds. Professor G. O. Hall and nine students from the class in poultry breeding drove to Batavia on Saturday, March 7 to attend the Show. On their return they stopped at Stafford, New York, to visit the poultry buildings which are being constructed for the Western New York Egg-Laying Contest.

Accidents may happen in the best of families. "Cluff" was soldering a gasoline tank in the rural engineering lab when, all at once, the building shook and a loud report rang through the rooms. "Cluff" was lying on the floor and the four windows were without panes. There were no injuries, however, and only a peculiar odor, like burned gunpowder, carried about in the newly created drafts, served to remind the lab section that they had all had a narrow escape.

PROPOSES NEW USE FOR CORK

Professor H. W. Riley of the department of agricultural engineering went to Camden, New Jersey on March 3 to discuss with representatives of the dairy industry, the Portland cement industry, and a cork company, a new type of cork board package which he has proposed. The package is to be used in the construction of concrete milk cooling tanks. It is to be waterproof, thermally insulated, and of such a size that it can be readily used in four sizes of milk tanks. Professor Riley aroused interest in the new package last January when he showed movies of milk tank construction before the Pennsylvania Dairy Association and the Pennsylvania Association of Milk Inspectors. He has suggested a satisfactory method of preparation of the packages, and it will probably be adopted by the cork board company.

Dr. Henderson Smith, a widely known authority on the virus diseases of plants, spent several days during the week of March 15 conferring with members of the plant pathology department and delivering the seminar lecture of that week. Dr. Smith is connected with the Rothamsted Experiment Station located at Harpenden, Hertfordshire, England. Before coming to Cornell he spent a month at the Boyce Thompson Institute at the Bronx, New York City, and his next visit will be to the University of Wisconsin.

POTATOES PROVE PROFITABLE

Potatoes paid the highest return for an hour's labor on New York State farms which kept cost account records according to Professor L. E. Cruikshank '27 of the farm management department.

Some other profitable crops as shown by the accounts on these farms are: apples, which returned 83 cents an hour, alfalfa, with 81 cents an hour, and cabbage, which paid 61 cents an hour. The least profitable crops were buckwheat, oats, corn, and barley, all of which lost money. The accounts also revealed that the returns for an hour of labor were greatly increased as the yield increased.

Climate, soil, topography, and transportation costs depending on the distance to market, are the chief items affecting the choice of crops. However a combination of different enterprises yields the highest returns. Dairy farms having less than 40 per cent of their returns from dairy products have labor incomes of \$948 a year while those with over 80 per cent of their returns from dairy products have a labor income of \$34 a year.

HOME STUDIES FOR BEEKEEPERS

A home study course in beekeeping has been prepared by G. S. Butts '25, instructor at the College of Agriculture, to meet the growing demand for technical information about beekeeping. The course consists of thirteen lessons and is free to all residents of New York State who have bees. The lessons consider such subjects as apiary site and equipment, study of the colony and individual, state laws regarding bees, general care of both comb and extracted honey, and the grading and selling of honey.

The present realization of the value of honey bees as pollinators in orchards has created greater interest in beekeeping, both among the orchardists, and beekeepers. In some instances beekeepers are making a new business of furnishing bees to fruit growers during the blossoming season. Where bees cannot be rented many orchardists are getting bees of their own to aid the process of pollinating.

Books

Reading maketh a full man—*Francis Bacon*

ART IN EVERY DAY LIFE. By Harriet Goldstein and Vetta Goldstein. Macmillan Company, New York. \$3.50.

This is an extensive text treating on art in relation to every day problems. The applications used are many and varied and illustrations profuse. Fields such as house planning and decoration, commercial work, city planning and costume design are covered. The authors have gone to considerable effort to cover such a variety of fields for almost all subjects mentioned are fully discussed.

The earlier part of the book is devoted to the principles and theories of art and decoration. These are later specifically applied by means of examples and illustrations. Munsell's and Pratt's color systems are clearly explained and illustrated in color, thus facilitating a study of color to the art student.

Perhaps the most notable part of this book is that treating on interior decoration and arrangement. Here the reader finds a wealth of material that serves him well. The photographs and ideas presented are rich in suggestions to the beginning decorator. An important part in this section is that entitled "Making the Best of One's Possessions" for after all this is a subject in which the majority of us is interested. Some objections have been raised because several of the illustrations are out of date and all examples are not applicable for modern usage.

THE MODERN FAMILY by Ruth Reed. Alfred A. Knopf, New York. Trade Edition \$3.00, Text Edition \$2.50.

This book contains a thorough discussion of present-day family problems. The author traces the evolution of the family through the ages and gives numerous interesting as well as enlightening examples of the old ideas of family life and relationships. She shows how we have changed our social and economic systems in many ways but have failed to make corresponding changes in our marriage customs and laws.

This is a direct and open challenge to those who have retained their old ideas as to the "inviolable sanctity" of marriage and have refused to discuss the pertinent problems confronting it. The continued increase in the divorce rate and the increased prominence of other problems have made the people recognize the need for some kind of reform. For them, Miss Reed has provided much material for consideration and has written an unbiased account of the present situation in this country.

Any student in Sociology will find this interesting reading matter. It can also be recommended to those who may wish to further enlighten themselves on this question so vitally important today.

NOW WE'RE LOGGIN'! By Paul Hosmer. Introduction by Stewart H. Holbrook. Portland, Oregon; Metropolitan Press. \$2.00.

Mr. Hosmer treats the lumber industry and the lumberjack of the Northwest lightly, but not slightly. He knows the industry thoroughly, and in spite of the humor of the book, he conveys a considerable amount of information. Fifteen personalities of the logging industry are characterized. Mr. Hosmer tells of their duties, their characteristics, their successes and failures, and their fun.

It is the old story of the "butcher, the baker", but now translated into the lumberjack, the foremen of the yards and sawmills, the sales managers, the logging bosses, the cook, the forester, and the various other individuals engaged in furnishing us with our supply of lumber. Perhaps the rugged robust lumberjack is the one who most appeals to our imaginations. Surely these old timers added much to the picturesqueness of a logging camp. As these men pass, a new type enters—the graduates of forestry schools and colleges—better for the industry perhaps, but lacking in appeal to our minds.

To laugh or to learn is good; to laugh and to learn is much better. Surely this work of Mr. Hosmer's will help you do both.



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Fastidious women who delight in retaining and enhancing personal charm will find many aids here for the perfect toilette. Perfumes of rare, exotic fragrance; dainty atomizers of various sizes; toilet waters that refresh and beautify—these are but a few of many suggestions from which Milady can choose.

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Doings

HOME ECONOMICS TAKES NEW STEP IN EDUCATION

A GROUP of seven home economics students met with the seven members of the Faculty Educational Policy Committee of the College of Home Economics around a long table in the Apartment on March 9 to discuss and plan for next year's curriculum. The benefit was mutual—students getting the faculty problems and point of view, and faculty getting student criticism of and suggestions for courses.

Discussion was mainly based on what subjects should or should not be required and made prerequisites. The joint committees are working toward a grouping of requirements similar to the one in the College of Agriculture. The plan suggested was to require 30 hours of general education, including English, botany, biology, or zoology, chemistry or foods 2, physiology, economics, and hygiene. Future study is to be made of this group, however. It was decided that physics should be required for entrance. The Ag schedule then proposes a group of subjects considered basic to the students' major, or choice for specialization, from which group the student must take 18 hours. In this group are included bacteriology, psychology, drawing, sociology, higher math or chemistry, and others. The committee discussed other grouped requirements—what was meant by the 18 hour, so-called science group, how it happened in Agriculture, how Home Economics should proceed to determine what should be done about it, and whether the College should have several such groups leading to different lines of specialization.

Hours Left for Specialization

There would then be left about 55 hours for specialization in Home Economics, some of which might be required as fundamental for a Home Economics education, as foods 1, household arts 1, clothing 3 and 5, and orientation to family life 100. Such a grouping of requirements would allow 20 hours of electives to be taken in any college.

Since this was only the first joint committee meeting any outline is still, of course, tentative and subject to further deliberations of staff and students, who will meet separately before coming together in joint meeting again. But just the one round-table discussion of this committee proved the possibilities of joint faculty and student direction of education. It's a new thing, an experiment which the College of Home Economics feels may have lasting influence.

HOME ECONOMIC INFORMATION COMMITTEE APPOINTED

Professor Bristow Adams, editor of publications at Cornell, has just been appointed chairman of a committee on Home Economic Information by E. R. Price, agricultural editor at Virginia Polytechnic Institution at Blackburg, Virginia, and president of the American Association of Agricultural Editors.

Other members of the committee are: Miss H. B. Crouch, formerly of the College of Home Economics at Cornell and now with the United States Department of Agriculture; Miss Marjorie Arbour, home economics editor of Louisiana University, and Mrs. I. V. Yoast, extension editor of New Mexico State College. The committee will report at the next meeting of the association at Washington State College in August.

MISS MITCHELL SPEAKS ON FOOD PROBLEMS IN LABRADOR

Miss Mitchell, nutrition expert from the Battlecreek Health Sanatorium, lectured in the home economics building on Wednesday afternoon, March 11, concerning the work that is being done in Labrador to better conditions there and to teach the natives better food and health habits. Miss Mitchell has done extensive work there herself and at present has colleagues who are furthering the work already started.

In connection with the lecture, slides were shown illustrating the conditions prevailing in that region. The work done by Sir Richard Grenfell was very evident in many of the pictures shown.

Labrador is a barren country where summer comes for only about two months in the year, and even then it is an uncertain one. The ground is hard and rocky making the production of crops very difficult, and those grown are mainly vegetables which grow quickly or else have been started inside and then put in the soil to grow. There are very few cows in Labrador; what milk is used comes from goats which are dry for a large part of the year. The chief occupation is fishing, and as the income derived from selling the fish is the only one which most of them have, the finances of most of the natives are very meager.

In the fall when the money from the fish is obtained the husband buys the stock of food for the family for the ensuing year. His selection is something on this order: hard bread, white flour, salted pork and beef, molasses, perhaps some oatmeal, and some raisins as a luxury for Christmas. Of course some salt fish are saved for the family use. It can readily be seen that something is lacking in this diet. It is not lacking in protein, carbohydrate, or fat, but it is very deficient in vitamins A and C. As a result of these needs much sickness prevails in Labrador. Such diseases as rickets, tuberculosis, and hard and frequent colds are most found, while the teeth of all the adults and many of the children are in pitiable condition because of the lack of minerals and the proper vitamins.

The work being done now in Labrador is to help the natives to help themselves and not to pauperize them by giving them all of these much needed items. By first educating them with proper health habits and then teaching them how to adapt these to the existing conditions, relief and enlightenment is gradually being brought to these people of the North.

FAMOUS COOK LECTURES

GEORGE W. RECTOR '00, present Director of Cuisine of the Chicago, Milwaukee, and St. Paul Railroad, son of Charles E. Rector of restaurant fame and himself a world authority on cookery, gave a lecture-demonstration before hotel administration students and members of the home economics foods department on Friday, March 6.

Mr. Rector was a prominent undergraduate at Cornell, being entered in the Law School. Upon graduation in 1900, he went to Paris to learn the art of preparing delicacies for his father's clientele in New York. He received several French honorary cuisine awards before assuming a post in his father's famous restaurant, advancing finally to his present position. He is the author of several cook books.

Mr. Rector emphasized the preparation of delicacies at a medium cost. One triumph of the thrifty French housewife is onion soup au gratin. One quart of beef broth and four large onions were the basis for this nourishing and full flavored soup. He sliced the onions thin and browned them in two tablespoonfuls of butter, adding more when necessary to keep them moist while cooking. When the onions were tender the beef broth, a teaspoonful of Worcestershire sauce, half a teaspoonful of salt, and a pinch of pepper were added. This was brought to the boiling point, and on top of the soup toasted slices of small round rolls were placed. These were sprinkled with grated parmesan cheese, placed under the broiler burner and browned for about ten minutes. Mr. Rector thinks an earthen marmite the proper dish in which to serve onion soup. This soup, which is sold in most restaurants for from forty cents to a dollar, may be made at home for about two and a half cents, he says.

French Dishes Proved Popular

Canape of crabmeat was one of the most popular dishes at Rector's. To a pound of crabmeat was added a tablespoonful each of finely chopped green peppers (previously blanched) and finely chopped pimentos, seasoning with salt and a pinch of pepper. He prepared a rich cream sauce by melting a tablespoonful of butter with a quarter teaspoonful of salt and a few grains of red pepper, blending in a tablespoonful of flour, and gradually adding a cupful of scalded cream. This mixture was stirred over a low flame until it was perfectly smooth, and then brought to the boiling point and boiled for two minutes. The cream sauce was added to the crabmeat and mixed well, then the mixture heaped neatly on the top of rounds or squares of toasted bread, sprinkled with parmesan cheese, dotted with butter, and browned in the oven. The mixture was thick enough not to run over the edges of the canape.

The thin, dainty French pancake, called crepe suzette, has become popular in this country as well as in France. Mr. Rector's recipe called for two cupfuls of pastry flour, sifted with a pinch of salt, four eggs, two cupfuls of milk, and a tea-

spoonful of orange juice. Strain the mixture to be sure it is perfectly smooth. The pancakes should be cooked in a small frying pan, with butter, and should contain just enough of the thin batter to cover the bottom of the pan. Spread each pancake with currant jelly or any other jelly or preserve, and roll it up. Sprinkle with powdered sugar and serve.

"DOUGH BUSTERS" PLAN NEXT YEAR'S WORK

County agriculture, 4-H Club, and home demonstration agents attended the Annual State Extension Service Conference here at Cornell March 23 to 28, to plan their programs for work in the field throughout the next year.

The home economics program consisted of discussions of the various projects to be carried out in all departments of home economics including clothing, household management, child guidance, house furnishing, and others. Professor Van Rensselaer reported on the White House Conference and plans were made to carry forward the findings of that committee. Problems of improving marketing conditions, school houses and grounds were discussed; also the contributions of College of Agriculture specialists in home demonstration work—the use of sewing machine schools, electrification projects, and help from the amateur dramatic specialist. The president of the Dairymen's League spoke to the women about the dairy situation and Professor Van Rensselaer presented civics and health projects.

New county agents were initiated to the society of the Sod Busters, Dough Busters, and Kid Boosters on Monday evening, March 23. Tuesday evening a Frying-Pan dinner was held for all the agents, and on Wednesday evening Epsilon Sigma Phi, national honorary fraternity for extension workers of ten years' service held its annual state meeting.

APRIL RADIO TALKS

The following talks will be given during the month of April by members of the home economics faculty as part of the daily University Radio Hour from four-thirty to five-thirty in the afternoon.

- April 6—Women's Part in Cooperative Marketing, Mrs. A. W. Smith.
- April 10—Planning a Community Supper, Charlotte Merrell.
- April 13—Preparation of the Main Dish and Vegetables for the Community Supper, Gertrude Betten.
- April 17—Salads and Hot Breads Easily Prepared for the Community Supper, Gertrude Betten.
- April 20—Good Coffee with Your Desert at the Community Supper, Margaret Scheer.
- April 24—What We May Learn from Our Oriental Neighbors, Dora W. Erway.
- April 27—Magazine and Newspaper Interest of New York State Homemakers, Dorothy Delaney.

LODGE HAS LABOR DAY

Professor Grace Morin's household art 31 class and the girls in the lodge at that time had a Labor Day at the lodge on Friday, March 3. The work on the downstairs redecoration was completed. A tea dance was given on Saturday in honor of the occasion, and a tea for the chaperons on Sunday afternoon.

Next month there will be a special article in the CORNELL COUNTRYMAN on house redecoration, illustrated by what was done to make a new lodge out of the house that was originally three old buildings.

GIRLS CONTINUE TO HELP

AT CHILDREN'S HOME

The kids in the Ithaca Children's Home are having a gay time this spring with their roller skates, marbles, games, and toys. Various gifts from board members, toys which the girls have helped the children to make, and plenty of magazines to cut up make the toy cupboard amply full. It has never been empty, contrary to a statement in the February issue which we wish to correct. All winter, sleds and skis were everyone's delight when children (and the girls, too) went sliding "up on West Hill."

A new project is being carried on by the department of nutrition in connection with the Children's Home. Professor Helen Monsch is working with a group of students in preparing menus for daily use. It is hoped that scales may be procured so that the children can be weighed and records kept to carry out a health program, bringing the underweight up to normal and keeping the normal children healthy. Nutrition students are finding a first-hand opportunity to study the special needs of growing children.

STUDENT-STAFF PARTICIPATION

IN GUIDANCE OF FRESHMEN

Members of the staff of the College of Home Economics, in a course, special problems 160b, this term are training members of the sophomore and junior classes to be orientation leaders next year, or in other words, to work with the faculty in helping freshmen become acclimated to Cornell generally, and to the new life personally. An attempt is being made to aid the leaders in understanding their own behavior drives so that they may be able next year to understand and help the freshman with her problems. It is planned that each upperclassman shall be assigned to about five entering girls for freshman week-end and about nine girls in an orientation course. The leader will then work with the girls' faculty advisors, mapping out possible courses of study, introducing her around, answering questions as to social life and helping her learn to study. The whole aim of this leadership training course is to provide a sure friend to whom the proverbially "mazed" freshman may turn.

HOME EC WHAT-NOTS

Mrs. Kathleen H. Small is taking the place of Miss Crouch as editor of Home Economics. Mrs. Small was formerly at Bachrach Studio in Syracuse.

One of Mrs. Dorothy Scott's classes in household arts 1 has prepared an exhibit of Arrangement in Letter-Writing which was presented to the home demonstration agents here during March for their annual conference.

The household art 32 class is working on special furnishing problems in home and community life on such questions as redecoration of a tea room, planning and furnishing of a combination bedroom and playroom for children, redecoration of a beauty shop, home bureau office, and a one-room apartment. One section of the household art 31 class is drawing up a furnishing plan for dormitories, dining room, children's play room, and director's room of the children's Home of Ithaca.

Ye Hosts, the hotel men's honorary social club is sponsoring a weekly upper-class luncheon and get-together, to be held at Willard Straight Fridays at one o'clock. Visiting hotel men will be guests at this luncheon but there will be no speeches.

MISS FISH MAKES SURVEY OF

'COLLEGE GIRLS' CLOTHING

Felt hats as compared to all other kinds rank three to one with seniors in the College of Home Economics at Cornell University, reports Marian Fish of the College from an investigation on what kind of clothing college women buy. She also learned that leatherette coats and slickers are extremely popular here, while proportionately few students had cloth sports coats with fur trimmings; about one-third fur coats. The majority of the girls invest in a cloth coat of good value rather than a cheap fur coat. Woolens, sports, and afternoon silks seemed the most desirable kinds of dresses, with evening dresses next in importance.

As for costs, they ranged, for felt hats, from sixty cents to twenty-two dollars and fifty cents; for leatherette coats, from nine dollars to fifteen; from one to eighteen dollars for slickers. The price of winter coats is from fifteen dollars to one hundred and ninety-seven dollars; that of woolen stockings from one dollar to fourteen.

UNIVERSITIES—AMERICAN, ENGLISH, GERMAN by Abraham Flexnor, Oxford University Press, New York, \$3.50.

Universities have been the subject of much criticism in recent years but most of it has been too obvious, or too spontaneous, and all of it has lacked the support of really impressive reasoning. Consequently the universities have emerged from it all with dignity only slightly impaired and without undergoing noticeable change. The circumstance is most unfortunate because, as all college people know, there is a great deal in our educational system that is severely ailing. What has been greatly needed for a long time is an intelligent and sympathetic analysis of our universities, liberally bolstered with common sense gleaned from experience and more than a few hours of serious contemplation. It is not unreasonable to expect that such an effort would compel action and that is the prime element of all constructive criticism.

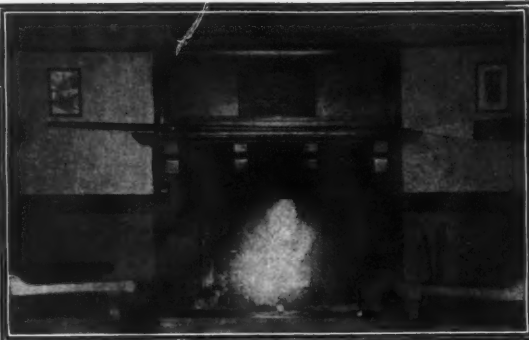
Dr. Flexnor has succeeded admirably well in presenting our universities with all of their shortcomings laid bare. With all of the vigor of an enthusiastic student he tells concisely what must be done if the world is not to be without the sort of aid which can come only from the higher institutions of learning. To start with Dr. Flexnor outlines the proper position of a university in modern society, and with that as a basis he constructs an ideal university patterned to fill that place exactly. The proper function of a university revolves about four major functions which, briefly stated, are: to conserve and to interpret knowledge and ideas, to search for truth, and to train students who will practise and carry on these functions. Any unrelated activity then is without the sphere of the university and its presence is detrimental to the major functions. The author believes that the work of universities is impaired by the necessity of producing results to gratify a public which looks to them for the solution of its immediate problems. The products of universities should not be what the public wants but what the public needs and these things can best be discovered by attacking the situation without the responsibility of producing immediate results or for that matter, any results at all.

Judging by the amount of appreciative comment that has followed the appearance of this book it may be expected that the policies of our universities will undergo revisions to conform more closely to Dr. Flexnor's ideal. The process will be slow but one is convinced that it is inevitable.

Cornell



For the Disciples



Foresters



Of Saint Murphius

FOREST SERVICE SUPERVISOR VISITS FORESTRY DEPARTMENT

Supervisor John C. Kuhns of the Whitman National Forest in Oregon conducted a series of lectures at Fernow Hall during the week of March 2. Mr. Kuhns came as a representative of the United States Forest Service to the various forestry schools of the country. Each year a forest supervisor is so designated and the policy serves to keep the schools in touch with all the latest developments in the government service.

Supervisor Kuhns' lectures were divided among various subjects according to his audiences. His first talk was one of introduction designed to acquaint the freshmen with the opportunities and work in the Forest Service. Mr. Kuhns pointed out that opportunities are manifold, promotion is fairly swift, and the salaries are equal to practically every other profession:

The remaining lectures were given over to the special topics of fire control and protection, range management, forest management, forest policy, and utilization. These talks were exceedingly interesting, being developed from a practical standpoint by a man who comes in contact with them every day. Mr. Kuhns emphasized his points by actual illustrations from the Whitman forest.

On Tuesday evening, March 3, Supervisor Kuhns gave an illustrated talk before the Forestry Club. He chose conditions and life on the Whitman forest as his topics and developed them in a very interesting manner.

The policy of sending a forest supervisor to the forest schools cannot be too highly valued. Mr. Kuhns' talks gave a clear picture of the organization and work of the Forest Service, served to clear up many doubtful points, and brought much new and valuable information to the students.

FORESTRY SPORTS

Well! Well! Here we are again. The Cornell Foresters basketball team slapped down the Vets and won the intercollegiate championship. Rather a unique record—not having lost a game for two successive years. Thus do the Foresters answer the challenge of rest of these two-bit colleges. And as for the C.E. aggregation—well, we will be magnanimous and not say anything.

Now that basketball is over we must begin to think of our laurels in the spring sports. Of course, the first thing we need is a rasslin' team. If any woodsmen want to risk a broken neck at this gentle pastime, just report to S. H. "Spence" Palmer '32.

We can't quit now. We have 17 points toward the intercollegiate trophy and Ag has only 10, but the story will be the same as last year—if we beat Ag we will win the intercollegiate championship.

For those who don't care to have their complexions ruined by rosin, we have

baseball, tennis, and the crew. If none of these suit you, we'll get some more.

U.S. FOREST SERVICE PURCHASES THREE NEW NATIONAL FORESTS

The United States Department of Agriculture has added three new National Forests to the existing 149 managed by the Forest Service. The areas were purchased under the provisions of the Clarke McNary Act of 1924 which allows the government to acquire forest land as reserves.

The new National Forests are located in District 9 in the upper peninsula of Michigan. Information as to their size and resources is of course meagre due to their recent acquisition.

The region in which they are located was severely exploited by lumbermen several decades ago and it is to be expected that the timbered areas will in no way approximate those of the western forests. However, the Forest Service in administering the cutover lands will be able to collect much valuable information as to the future of forests and forestry in the Lakes States area.

The purchase of the new forests gives the Forest Service an almost complete sample of the many and varied stands of our country.

What is Fernow Hall coming to, anyway? A few days ago three co-eds were discovered taking up good bench space in the hall—and they were smoking.

Are we going to stand by and see our own beloved Fernow desecrated by such actions? Are the Cornell Foresters slowly drifting into vacuity, or, in other words, are they becoming a bunch of pansies?

Then if we are not, let us rise up and remove this smirch from our record. If we don't, the building will be over-run with Domecon dames and where will the overworked forester find a place to stretch his tired carcass between classes?

OPPORTUNITY IS KNOCKING

To make life complete we need a couple of frosh or sophs to come out for the editorship of this page. There must be someone among your number that is sufficiently acquainted with the English language so that he can write a coherent sentence. However, we will not require that you know the English tongue, but you must be able to at least write your own name.

If any of you future bulwarks of the nation feel the literary urge, just accost the editor or his right hand man, W.L. "Bill" Chapel '32 and you will be installed in the noblest (?) position on the hill. Don't be lazy all your life.

The 20th Forest Engineers are planning a mass reunion for 1935.

SENIORS LEAVE FOR THE SOUTH

Noon, Wednesday, March 25, marked the exodus of the seniors from the alush and cold of Ithaca to the sun-kissed land of South Carolina. The old red truck, loaded with the flower of Fernow Hall (including Professor S. N. "Sammy" Spring to keep the flower pure and sweet enroute), started on the long and weary trip amid the cheers and huzzahs of the multitude.

The seniors will spend two glorious weeks frolicking among the alligators and the banana bushes. If time permits, they will also study the forests and logging conditions in the South.

We are sure the trip will be noteworthy and it is still a question whether the boys will stop in Washington and give President Hoover some first hand advice on how to run the Forest Service.

The seniors will arrive in Charleston sometime Friday, weather permitting. Then, they will be loaded on either a logging train or a boat and transported to the up and coming town of Witherbee, the headquarters and home of the Cornell Foresters during their sojourn among the southern pines.

Ye editor has vowed that he will shoot an alligator and have it stuffed and hung above the portals of Fernow Hall. Along with this vow is the determination to get the inside dope on whether to dunk or crumble cornbread in potlicker.

Watch the next issue for all the latest developments.

Nine aspirants to the positions offered by the Forest Service tried the Civil Service examination on March 11. The consensus of opinion seems to be that they are all going to try it again next year. That seems silly and ye editor is willing to wager one copy of Dr. Miles Almanac that all of them passed it.

Professors R. S. Hosmer and A. B. Recknagel recently attended a meeting of the Conservation Advisory Council held in Albany. Professor Hosmer attended in his own right and Professor Recknagel was a special representative. The meeting was chiefly concerned with game measures.

HEARD IN THE DEPARTMENT

"The proof of the pudding is in the eating."

"Train a child in the way it shall go, and away it will go."

"Snoozel Lumber Company."

"Taste of eet, schmell of eet, feel of eet."

"In this hand I hold—"

"No smoking in the laboratories."

Now that spring has arrived, the men out for lacrosse will find their sticks of additional value as snowshoes.

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